

Manufacturers Record

Industry Construction

Reg. U. S. Pat. Office



BALTIMORE, MD.

JUNE 16, 1932

JUN 18 1932

Congress Nears End

The nation will welcome the end of the present session of Congress. The uncertainty about what would be done or would not be done in balancing the budget, creating revenue from taxation, reducing expenditures and passing radical legislation has kept business in a state of dread. No plans could be made for the immediate future without knowledge of what action would be taken.

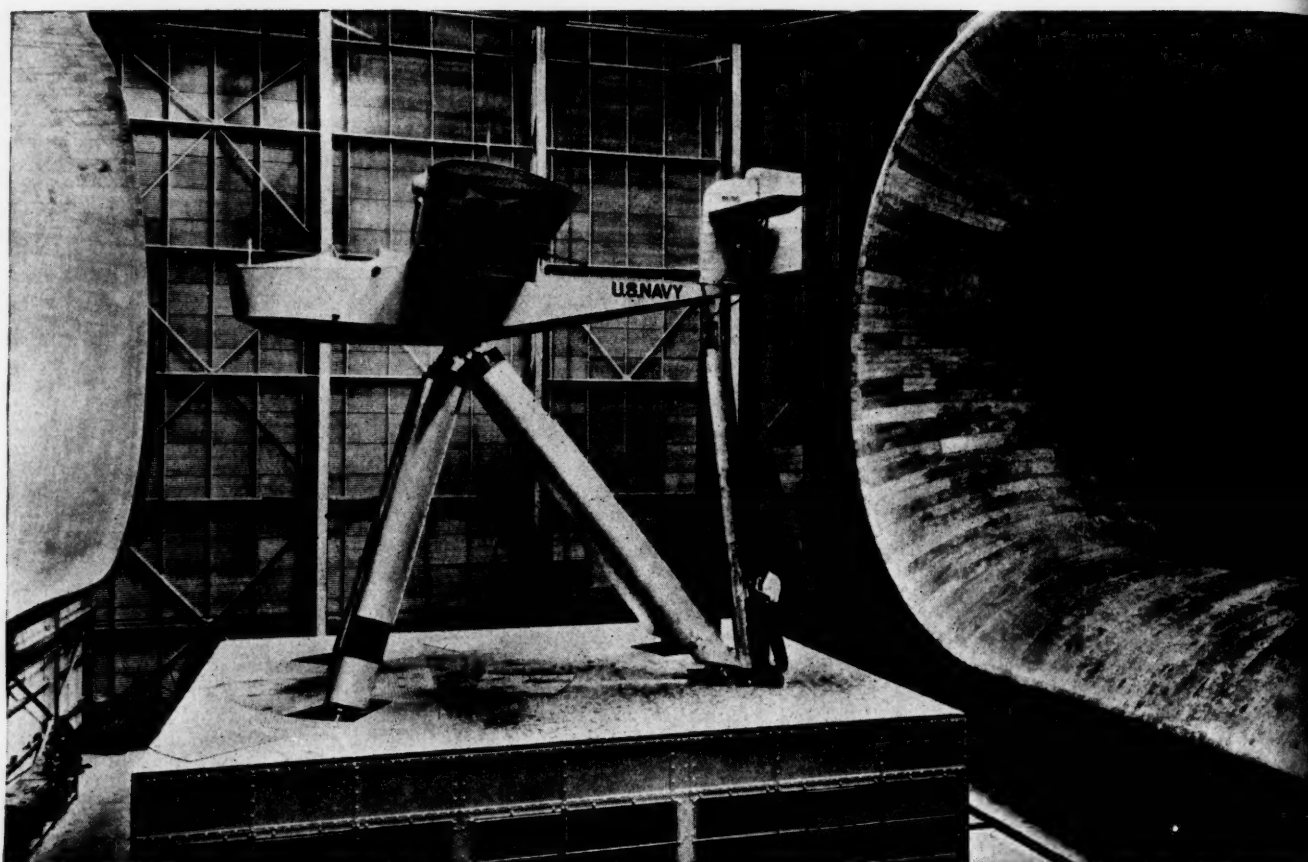
As this is written the menace of bonus legislation has not been completely removed and there are still some disturbing measures to be defeated, while the extent of economies to be effected as part of the budget balancing program is still unknown. It is clear, however, that the insistent demand of the country for drastic reductions in expenses is a long way from having been met, and the reason for the delay and refusal on the part of Congress to do this is past finding out. On the whole, however, probably it will be agreed that that which has been adopted so far will not destroy what is left of American business, and thereby encouragement is afforded to vigorously attempt the solution of individual problems.

Constructive work was done in providing support for financial institutions and help for the railroads, and while the tax bill is unjust in many particulars, it will no doubt be received as a necessary enactment to raise essential revenue.

The hope of the future is in the inherent progressive spirit of our people, in our unmatched natural resources of raw materials and the tools represented by industrial capacity. With sales ahead of production the start should come soon.

Financial reports tell of a halt in credit deflation. The figures submitted by reporting banks show a decline in total loans of \$42,000,000 in the last two months, or less than $\frac{1}{4}$ of 1 per cent as contrasted with an average weekly decline of \$109,000,000 in the period from September 30, 1931 to April 13, 1932. Last week, for the first time since November, 1931, loans showed an increase.

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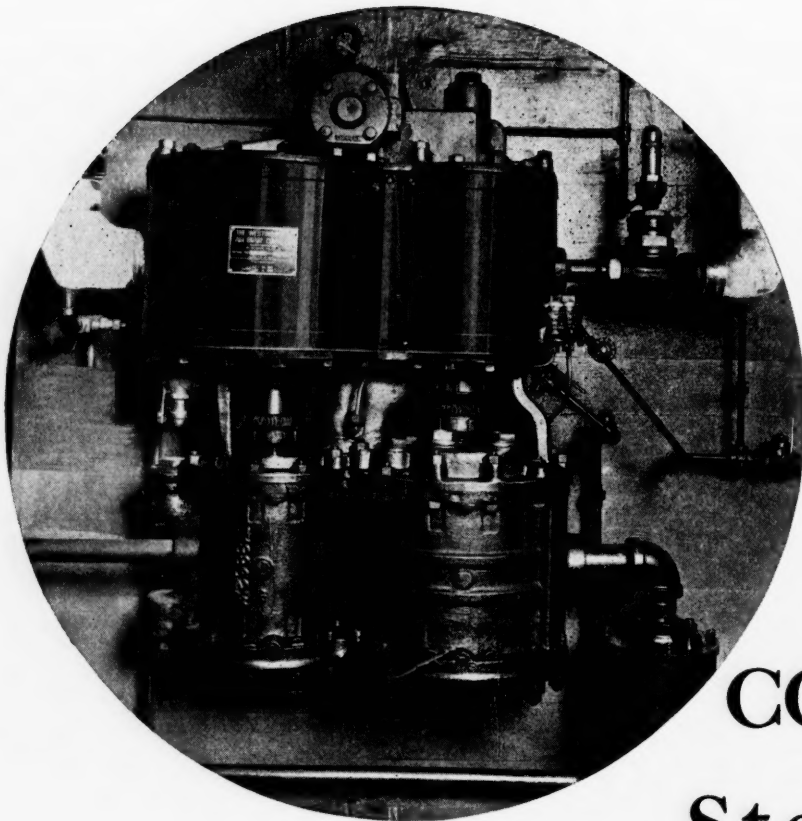
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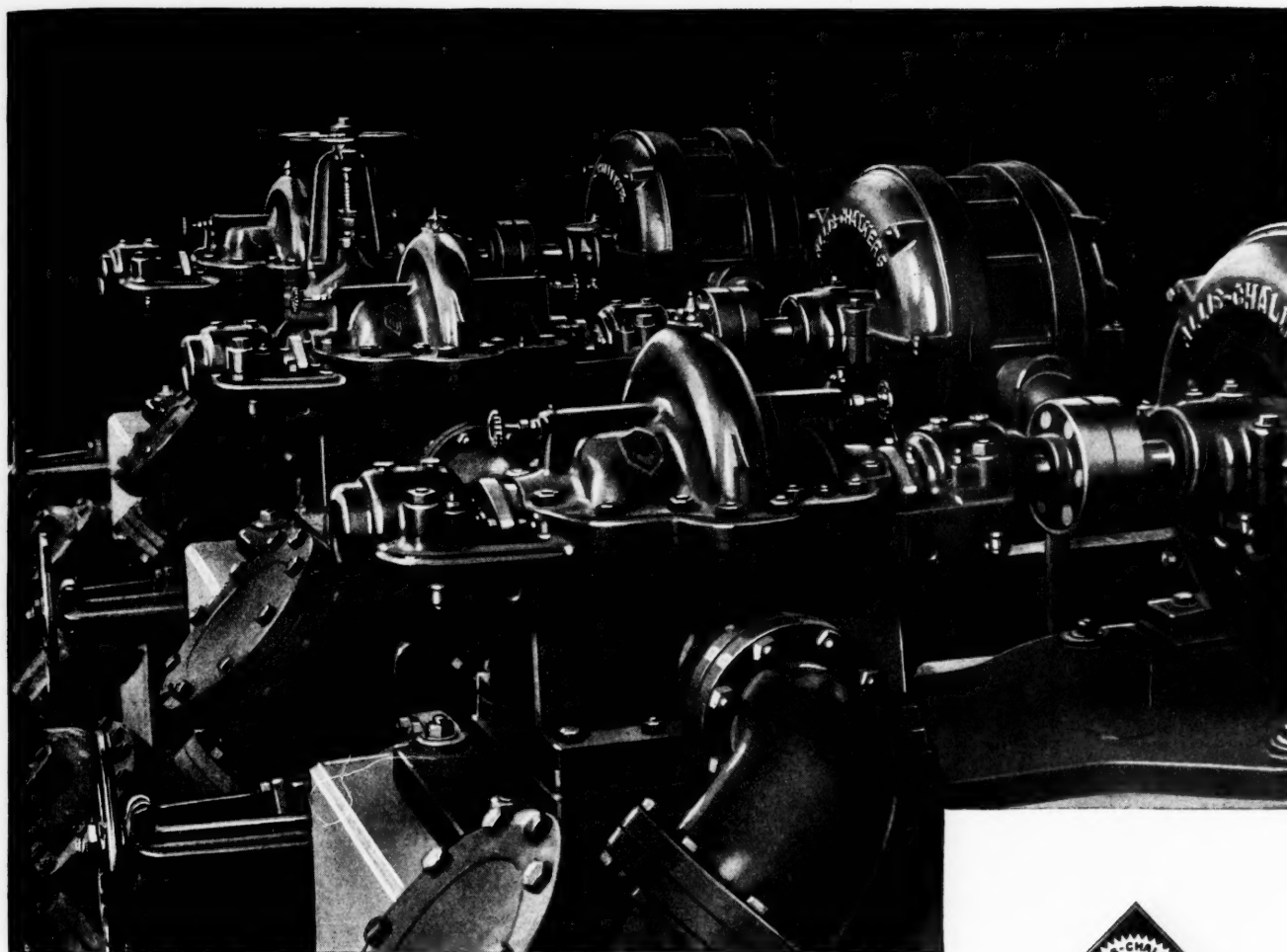
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Baltimore, Md., June 16, 1932

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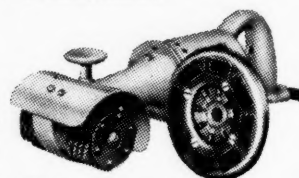
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Manufacturers Record

Reg. U. S. Pat. Office

Devoted to the Upbuilding of the Nation Through the Development
of the South and Southwest as the Nation's Greatest Material Asset

Vol. CI No. 24 }
Weekly }

BALTIMORE, JUNE 16, 1932

{ Single Copies, 20 Cents.
{ \$6.50 a Year

Protect American Business

THE rest of the world owes the United States at least \$24,000,000,000. Approximately one-quarter of this total debt was for actual expense incurred during the World War. Most of the money due the American people is on their foreign bond investments and accrued interest, for goods sold and services rendered after the war. These loans were for rehabilitation (?), for increasing industrial efficiency, and for carrying on trade. When we stopped making these loans, our sales abroad dropped. High tariff rates, as some contend, did not enter into the question. The decline was the result of an almost complete cessation of foreign financing; for the debtor nations, unable to meet maturing obligations, found it necessary to restrict buying abroad and to exert every effort to build up their own industries and increase their sales to foreign countries, America included. Now we have the fallacious argument that to collect our foreign debts we must allow our foreign debtors to sell us all the goods we can buy, regardless of the consequences to domestic industries.

Those supporting this specious line of reasoning say that we shut out these goods by a high tariff wall, and that other countries retaliated by raising tariff walls against us. There is no evidence that foreign tariffs of other countries were imposed solely against the United States. These tariffs were imposed as protective measures for their own industry and labor. Witness the fact that "free trade" England in the last ten years has collected annually \$562,000,000 in duties and tariffs as compared with our annual collection of \$570,000,000 during the same period. And the United States is supposed to be a high protection country. We cannot deny to foreign countries the right to protect their own markets from cheap goods

of other nations which undermine their industries and throw their workers out of employment.

This is all the United States has been attempting to do, protect its industries and its labor from cheap foreign commodities. What good would \$24,000,000,000 be to us, if in collecting it we destroyed most of our industries, or if in order to enable our industries to continue in operation we forced them to further reduce the pay scale to meet foreign levels, seriously reducing the buying power of American workers and thus curbing the domestic market which now represents more than 95 per cent of our total business?

American foreign trade has declined. Prices also have declined. Between 1930 and 1931 American exports were lowered about 20 per cent in quantity and about 37 per cent in value. While our imports declined by 31.7 per cent in value, exports dropped 36.9 per cent. This relatively smaller drop in imports is another indication that declining exports are not due entirely to smaller purchases by us from abroad. Due to the depression, foreign countries are not buying as much as formerly.

America is not alone in experiencing smaller sales to foreign countries. No nation has escaped in the world-wide depression. World exports declined more than 27 per cent from 1930. A compilation of the National Industrial Conference Board shows the drop in exports of 22 principal countries doing more than 75 per cent of the world's business. The figures by countries are shown on the following page.

Every country is trying to increase its sales abroad and to buy less foreign goods in return. Industries in the United States today are operating at 20 to 50 per cent of capacity and paying a reduced scale of wages for part time work. Most of these industries must meet foreign competition which is becoming more keen. We cannot accept the argument that in

Value of Exports of 22 Countries

Countries	1930	1931	Percentage Decline
United States.....	3,843,000,000	2,424,000,000	36.9
Canada	886,000,000	605,000,000	31.7
Great Britain	\$2,777,000,000	\$1,894,000,000	31.8
France	1,679,000,000	1,193,000,000	29.0
Belgium	730,000,000	647,000,000	11.4
Netherlands	691,000,000	527,000,000	23.7
Sweden	416,000,000	285,000,000	31.5
Switzerland	342,000,000	262,000,000	23.4
Germany	2,867,000,000	2,286,000,000	20.2
Italy	638,000,000	528,000,000	17.3
Norway	183,000,000	117,000,000	36.1
Denmark	433,000,000	333,000,000	23.1
Czechoslovakia ...	518,000,000	389,000,000	24.9
Poland	273,000,000	210,000,000	23.1
Jugoslavia	120,000,000	85,000,000	29.2
Austria	386,000,000	310,000,000	19.7
Argentina	513,000,000	427,000,000	16.8
Brazil	320,000,000	225,000,000	29.7
Chile	161,000,000	113,000,000	29.8
Columbia	109,000,000	95,000,000	12.8
Australia	431,000,000	328,000,000	23.9
Japan	726,000,000	560,000,000	22.9
Total	\$19,042,000,000	\$13,843,000,000	27.3

order to create business in the United States we must buy more foreign goods. Every dollar spent abroad for goods takes several dollars away from American trade and deprives American workers of a chance for employment to that extent. Labor represents in many commodities over 90 per cent of the cost of the finished article. In order to meet the cheap labor cost of foreign countries, without a protective tariff, we would be compelled to reduce the pay of American workers and thus bring down their scale of living to the basis of foreign labor. It is unthinkable that even the most outspoken "free trader," of which there may be a few left, would advocate such a policy.

Denying American labor and industry further protection against depreciated foreign currencies, which are nullifying the protection afforded by the limited existing tariff that now applies to only 35 per cent of our imports, is practically putting the United States on a free trade basis with countries now off the gold standard. Many imported commodities included in the 65 per cent total now on the free list must be given protection, for they can be bought abroad and transported to the United States at a figure that is below production cost in this country.

Since the above was written, an announcement comes from the Southern States Protective Tariff League of a South-wide Emergency Conference on Tariff to be held in Birmingham, July 26-27. The meeting is called for the purpose of urging emergency tariff legislation, designed to adjust American tariff duties and to compensate for depreciation in currencies of foreign countries. Bills of this nature now in the hands of the Ways and Means Committee of the House of Representatives provide for dollar valuation of imported commodities, instead of prices based on foreign currency values at point of origin. They impose a duty equal to the difference between the unit of measure of the country of exportation and the current rate of exchange.

Representatives of every line of manufacturing and agricultural activity in the South are invited to attend the conference. The Southern States Protective Tariff League, Morris Building, Birmingham, Ala., may be addressed.

Building and Loan Associations

ONE of the bright spots in the financial South has been the safety record established by its building and loan associations during the past two years. A noteworthy feature of their operation, states Morton Bodfish, executive manager of the United States Building and Loan League, is that the business has been on a closer to normal basis than with practically any other business in the country. When it is considered that there are more than 2700 building and loan associations located in the Southern states, that they have a total membership of more than 1,900,000, total assets of over \$1,400,000,000, and total mortgage loans outstanding in excess of \$1,200,000,000, and that only 10 associations failed during 1930 in the South, it is a remarkable record and a testimony to their soundness as contrasted with the general banking situation throughout the country during that year.

Taking the United States as a whole, slightly more than one-quarter of one per cent of the total building and loan assets were lost through failure in 1930, and this low percentage of loss applied also to the South. The 1931 figures, although not yet completely available, will show about as good a record.

Building and Loan Associations in the South, 1930
(1931 figures not yet available)

States	Number of Associations	Total Membership	Total Assets	Total Mortgage Loans Outstanding
Alabama	40	41,340	\$29,435,000	\$23,628,000
Arkansas	66	72,717	44,737,000	38,299,000
District of Columbia...	24	75,253	75,404,000	70,894,000
Florida	68	13,500	17,829,000	12,495,000
Georgia	37	16,731	6,039,000	5,229,000
Kentucky	161	182,900	118,928,000	116,012,000
Louisiana	102	200,930	182,358,000	161,526,000
Maryland	1,150	330,000	220,000,000	*190,000,000
Mississippi	47	30,000	20,462,000	18,410,000
Missouri	242	282,031	210,921,000	184,861,000
North Carolina	235	95,915	92,192,000	84,166,000
Oklahoma	82	255,000	139,804,000	126,838,000
South Carolina	150	34,000	27,000,000	*23,000,000
Tennessee	41	25,100	18,599,000	15,687,000
Texas	154	184,760	134,743,000	119,681,000
Virginia	92	6,730	60,440,000	54,259,000
West Virginia	63	58,800	36,252,000	32,181,000
Total South	2,754	1,965,707	\$1,434,943,000	\$1,277,166,000

*Estimated.

Southern building and loan representatives have been among the staunchest supporters of the proposed Federal Home Loan Bank System, action on which is pending in Congress. The purpose of this government financing plan is to set up a reserve system in the home-financing field to make available to building and loan associations credit resources previously denied them. Every movement to provide financial institutions with credit which will enable them to halt the growing number of mortgage foreclosures against home owners is worthy of consideration. The steps being taken by financial groups in New York and elsewhere to furnish credit of this kind have not come too soon. Home ownership means substantial citizenship. It is imperative that every reasonable facility be given to the homeowner to retain his home.

There is no situation so dangerous as that of the advertiser who has arrived and sits back to enjoy his well-earned days of business ease.—Printers Ink.

Facing Facts

THE plan proposed by President Hoover, to add to the capital of the Reconstruction Finance Corporation another \$1,500,000,000 for loans to states and for other purposes, is probably the best way out of a serious dilemma. This country has come upon times different from those ever faced before. While our raw materials and our natural advantages remain unimpaired, it is necessary for our people to recognize and face the cold-blooded fact that both individuals and the industries we have set up have had their possessions and their values reduced to a point where, in many cases, they will have to start again almost from scratch.

Those without employment, men who have no jobs and are hungry, either will have to be cared for by whatever constituted power or source of wealth can care for them, or in all probability the army of unemployed marching upon Washington and demanding the payment of a bonus will increase to a point that may impair the authority of constituted government. It is much better, therefore, so long as private and organized charity is unable to care for those in need, that the states shall care for their own, and if this can be accomplished by loans from the government, it will have to be accepted as the way out.

We are heartily in accord with the utterance of Senator Borah that the men who have gone to the nation's capital to demand a bonus should be refused. Even if they are not led by Communistic ideas, the very fact that they are there is a potential menace.

How better can the situation be dealt with then to put it back definitely to the states, with assurance of funds to relieve the immediate distress of their own citizens? There plainly is work to be done by the clear-headed members and officers of the American legion in persuading these misguided marchers that they are harming their country and themselves by their course.

Progress or Retrogress

AN advertisement of the American Cable Co. opens with this bit of truth:

"Today every manufacturer is on trial before the bar of progress. Manufacturing technic must either progress or retrogress. Nothing can stand still and live. Everything grows or stagnates * * * and this applies to ideas as well."

Life is motion, death is stagnation.

Every step in the progress of mankind has resulted from the development of ideas. Some one mentality was not satisfied with "things as they are." From the lever and the wheel were evolved the great labor saving devices of today. Each development of a new idea marked man's rise from barbarism.

So it is with industries and the business of modern

times. These must continue to grow, to perfect and improve their products and services, else they slip backward.

Concerns receptive to new ideas and methods and machinery will work out of the present doldrums. They are not satisfied to wait for times to improve. They have been perfecting and developing new ways and materials to strengthen their sales efforts. It is the road to progress and prosperity. It means work, intelligently directed. It cannot be achieved by legislation that ignores the law of supply and demand.

It is from the virile management of this country which pushes on in the face of difficulties that we shall have progression instead of retrogression.

A Man

THERE is an insurance man in Baltimore who is an inspiration to his friends. He is new to the business, and although he passed middle age some time ago, he has entered upon a new pursuit with zest and courage and the smile of confidence. His fortune, which enabled him to retire from business ten years ago, has disappeared with many others, but he has his health and a devoted family and he tells his friends his possessions are beyond price. He has the advantage of a long business experience, which enables him to judge men and not waste their time unnecessarily. His approach to a prospect is a work of art, from which younger men might profit. There is no waste of time. He always leaves a worthwhile thought with the man he sees, whether he gets encouragement for the future or not.

Above all, in his attitude and his speech there is no bellyaching. He is a wholesome example to the wailers and the grouches who have played the game and lost, who blame our system of government and who want almost everything in the United States changed.

We are glad to speak of a man who stands out from the mass. And this leads to another thought.

In the day of great combinations not so long ago, when size seemed to count for more than merit, when we were all fooled by skyrocketers that were ascending in Wall Street, a question that many thoughtful men pondered was what was happening to the individual, his initiative, his energy and his character that had made this country's progress possible. The corner store had gone into the chain. The local enterprise was part of the national enterprise and too often affairs were being directed from headquarters far away and not always of benefit to the local community.

We have referred before to the renewed opportunity for small industry which has come about in these latter days. In the illustration cited—an illustration of courage and faith that is inspiring—there is good ground for belief in a better day.

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\$4,000,000 Army Air School Facilities

MAXWELL Field, which is the home of the Air Corps Tactical School at Montgomery, Ala., is rapidly assuming an appearance of permanency. Thirty buildings were completed during 1931. Over \$1,000,000 has been expended to date for these and other structures planned, under an expansion program to cost \$4,000,000. Prior to inauguration of the present U. S. Army housing program, the structures were of a temporary nature.

Included in the Congressional appropriation for work at Maxwell Field were: \$308,000 for barracks to accommodate 326 enlisted men; \$258,150 for quarters for 37 married non-commissioned officers; \$340,000 for quarters to accommodate 21 officers; \$75,000 for a 17-patient hospital; \$45,000 for a quartermaster warehouse, and \$40,000 for a garage.

Concrete and tile were the major ma-

terials used in constructing the tactical school, barracks building for 163 enlisted men, 12 double sets of non-commissioned officers' quarters, hospital and detachment barracks, post exchange, fire station and guard house, radio building and stable, all of which were completed in the past year. Roofs of these structures are of mission tile.

The four hangars are of concrete and steel construction with asbestos protected metal roofs. The headquarters, operations and parachute buildings are of concrete, steel and tile construction with tile roofing. All other structures, including garage, warehouses, shop and assembly buildings, are of similar construction, but with roofs of the plank deck built-up type. Finish of all buildings is stucco.

Captain M. A. McFadden is the constructing quartermaster in charge at the

project. Contractors for the buildings completed during 1931 are:

Samford Brothers, Inc., Montgomery, air corps tactical school, hospital and detachment barracks, post exchange, fire station and guard house.

Ogletree Construction Co., Anniston, barracks for 163 men and four steel hangars.

Batson-Cook Construction Co., West Point, Ga., nine double sets of N.C.O. quarters, warehouse, shop and assembly buildings.

Algernon Blair, Montgomery, three double sets of N. C. O. quarters, and radio building.

Smith-Pew Construction Co., Atlanta, Ga., maintenance building, garage, quartermaster warehouse, and stable.

Hodgson-Jones Construction Co., Montgomery, headquarters, operations and parachute buildings.

Chicago Bridge & Iron Works, Chicago, 300,000-gallon water tank and tower.



Non-Commissioned Officers Quarters, of Concrete and Tile Construction, at Maxwell Field, Montgomery, Ala.

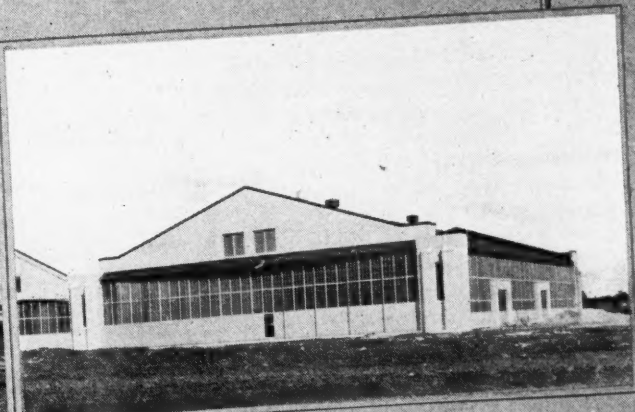
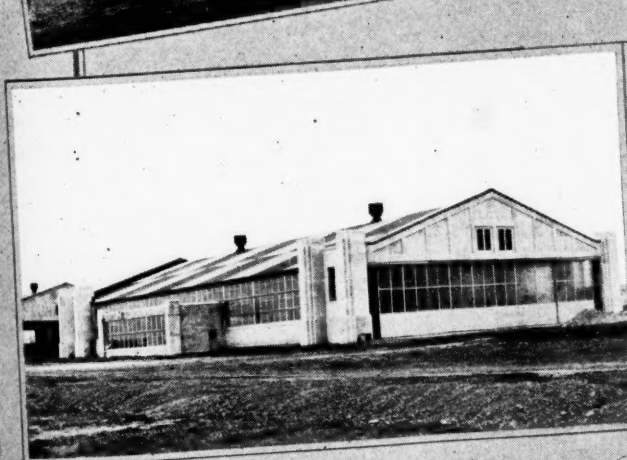
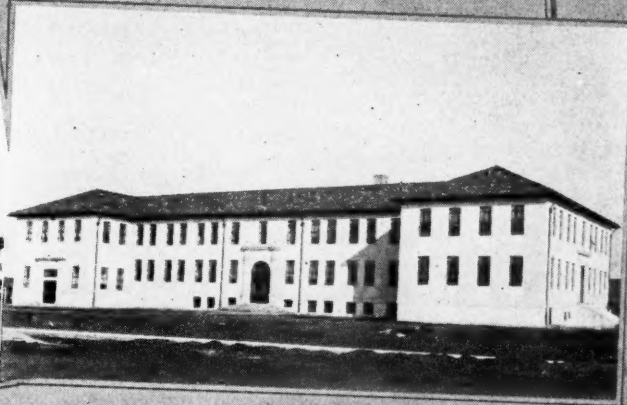
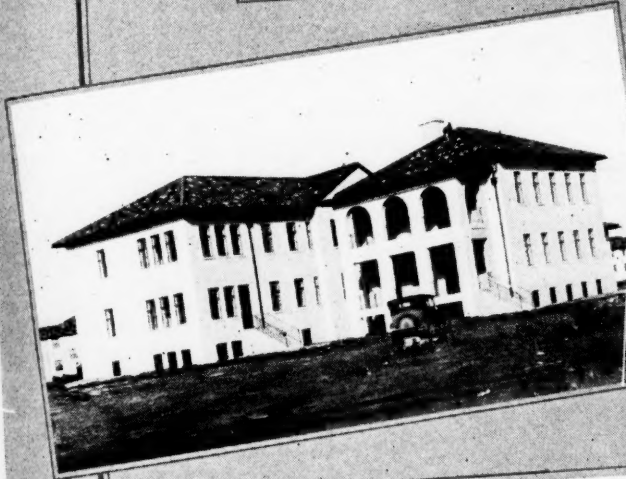
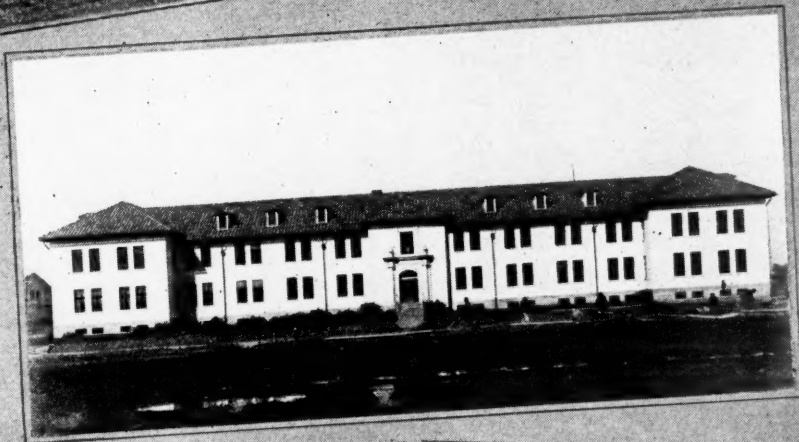
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Record

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Buildings at Maxwell Field: Non-Commissioned Officers Quarters, and Fire Station, Guard House, at top; Enlisted Men's Barracks, center; Hospital, Detachment Barracks and Tactical School, lower center; Hangar and Machine Shop at bottom

New Telephone Building for Charleston

Occupying the site of the old capitol in Charleston, W. Va., a new 6-story telephone building representing an investment of approximately \$2,200,000, including land, building and equipment, was recently completed for the Chesapeake and Potomac Telephone Company of West Virginia. Designed primarily for equipment purposes, the building will house the step-by-step dial equipment intended to replace the common battery manual service in the capitol central office area about the middle of 1932. A toll office also is being installed to handle a large volume of toll traffic that originates from and terminates in the city.

The new building is 96 by 124 feet, with about 60,000 square feet of usable floor space. In anticipation of possible future needs, foundations and structural steel are designed for an ultimate height of about 15 stories. This would be comparable to an office building of 20 stories. Architecturally, the building is of modern vertical type, with windows and doors framed in aluminum and main entrance lobby in the same material. Walls are of light buff brick and select buff Indiana limestone; floors are of concrete. In designing the business office, an effort was made to "create a cheerful atmosphere combined with quiet dignity" and this was accomplished by tinting the walls in a light tone.

Modern heating and ventilating equipment is installed in the basement, with the ventilating system designed to provide filtered, heated air to the operating room, business office, locker and battery rooms and to the board and reception rooms on the fourth floor. A feature of the structure is provision for duplicate power service. Three independent sources are available for use in event of an interruption on the first circuit. Step-by-step dial equipment is being installed in the terminal room on the second floor preparatory to the cutover from manual operation. The installation consists of 14,500 terminals, including an official private branch exchange of 300 terminals and the wire chief's test desk, embodying the latest developments for testing station equipment in a metropolitan area.

Meanor and Handloser, Charleston,



**\$2,200,000 Structure, Recently Completed
in Charleston, W. Va.**

were architects for the structure, and the Consolidated Engineering Company, Inc., Baltimore, general contractors. The following subcontracts were awarded:

Structural steel—McClintic Marshall Corporation, Pittsburgh, Pa.

Excavation and foundations—A. G. Higginbotham Co., Charleston

Structural steel erection—Cleveland branch of Detroit Steel Erection Company

Reinforcing steel and specialties—West Virginia Rail Company, Huntington, W. Va.

Glass and glazing—J. M. Gates Sons, Charleston

Plumbing and heating—Standard Engineering Company, Washington, D. C.

Plumbing fixtures—Bailey-Farrell Manufacturing Company, Charleston

Elevators—Philadelphia branch of Westinghouse Electric Elevator Company

Toilet partitions—Henry Weis Manufacturing Company, Elkhart, Ind.

Roofing and sheet metal work—W. F. Overly & Sons, Greensburg, Pa.

Elevator entrances and hollow metal work—Dahlstrom Metallic Door Company, Jamestown, N. Y.

Waterproofing—B. B. Holtz & Company, Inc., New York

Ornamental aluminum work—John Harsch Bronze Foundry Company, Cleveland, Ohio

Miscellaneous iron—James J. Weiler & Sons, Huntington

Face brick—Alliance Brick Company, Alliance, Ohio

Common brick—West Virginia Brick Company, Charleston

Tile, terrazzo and marble work—Standard Art Marble & Tile Company, Washington

Painting—W. W. Armstrong, Charleston

Electric work—Rosenblatt & Hunt, Charleston

Hardware—Pierson & Fielding, Charleston

Revolving door—Van Kannel Revolving Door Company, New York

Boilers—Kewanee Boiler Corporation, Kewanee, Ill.

Kitchen equipment—John-Van-Range Company, Cincinnati, Ohio.

\$6,500,000 BRIDGE PROGRESSING

Louisville and Nashville Railroad Building
Structure Across Ohio River

Henderson, Ky.—The erection of river spans of a \$6,500,000 bridge being built across the Ohio River here for the Louisville & Nashville Railroad Company, is now in progress, with 28 deck girder spans on the Indiana approach already completed, according to W. H. Courtenay, chief engineer of the railroad. Concrete piers and abutments for four street crossings in Henderson were built by the C. G. Kershaw Contracting Company, Birmingham, Ala., at a cost of \$36,079, while the superstructure for the crossings was furnished by the Virginia Bridge & Iron Company, Roanoke, at a cost of \$11,593. Superstructure over street crossings in Henderson and embankment between them were constructed by the railroad.

Masonry piers were constructed by the Missouri Valley Bridge & Iron Company, Leavenworth, Kans., at an estimated cost of \$513,882. Piers 3 to 9, inclusive, were sunk by the pneumatic caisson method. Piers 10 to 66, inclusive, on the Indiana side of the river have reinforced concrete pile foundations. The American Bridge Company, Pittsburgh, Pa., is fabricating the superstructure of the bridge proper at a cost of \$1,818,877. This construction will include four 500-foot spans and one 675-foot channel span, with double truck through truss construction; one deck span 240 feet long; 57 deck girder spans on the Indiana approach varying in length from 126 feet, 6 inches, to 30 feet. All masonry for the bridge has been completed.

Located downstream from the old bridge and approximately parallel to it, the new bridge will not have a draw span. The old bridge will be dismantled upon completion of the new one. On the Indiana side the railroad is constructing with its own forces and material a creosoted pile trestle to connect the girder spans with the existing trestle, about 3 miles long. General design of the bridge and detail plans for the masonry were made in the office of Mr. Courtenay and all work is being handled by the Louisville & Nashville engineering organization. The superstructure was designed by the engineering department of the fabricators and checked in Mr. Courtenay's office.

St. Petersburg, Fla.—With an attendance of 20 members, the Florida central chapter of the American Institute of Architects recently met here in the office of Henry L. Taylor, past president.

Profits From Metal Wastes

By

C. A. BASORE

Professor of Chemical Engineering,
Alabama Polytechnic Institute, Auburn

THE recovery, treatment and use of waste metal in normal times is reported by the U. S. Bureau of Mines as a half billion dollar industry. Secondary metals, i. e., those obtained from scrap metal, sweepings, skimmings and the like, constitute a large part of this waste metal. Over 5,000,000 tons of copper are recovered yearly from brass and scrap. Secondary lead production amounts to 3,000,000 tons, or 40 per cent of the total refined lead produced. Most of this lead is secured from battery plates, lead cables, lead pipe, solder, type metal and babbitt. Secondary tin recovered in the United States during normal times is valued at about \$35,000,000.

The following table, by the Bureau of Mines, gives the scrap metal recovered during 1929 and 1930. Note that scrap iron or steel and the precious metals are not included.

Scrap Metal Recovered and Value in 1929 and 1930

Metal	1929		1930	
	Short Tons	Value	Short Tons	Value
Copper, including that in alloys other than brass	417,000	\$146,995,000	332,800	\$86,528,000
Brass, scrap, remelted.....	296,500	76,000,000	192,000	39,000,000
Lead, as metal.....	138,500	39,186,000	129,000	25,580,000
Lead in alloys.....	172,500		126,800	
Zinc, as metal.....	65,400	10,164,000	49,300	5,472,000
Zinc in alloys other than brass.....	11,600		20,600	
Tin as metal.....	7,400	30,513,000	5,600	16,228,300
Tin in alloys, chemical compounds, etc.....	26,900		20,600	
Antimony as metal.....	52	1,990,200		41,239,800
Antimony as alloys.....	11,079		8,082	
Aluminum as metal.....	25,850	23,135,200	19,700	17,177,000
Aluminum in alloys.....	22,550		18,900	
Nickel as metal.....	850	3,045,000	500	2,030,000
Nickel in nonferrous alloys and compounds.....	3,500		2,400	
Total		\$331,028,900		\$193,255,100

Iron and steel scrap are employed in various ways. At plants producing steel wire, nails and other articles, scrap is often converted into ferrous sulphate. The exhausted "pickling liquor" employed for removing scale from the wire is isolated, the free sulphuric acid neutralized with scrap iron or steel, the solution concentrated and the ferrous sulphate crystallized out and dried. As is generally known, steel scrap is often a constituent of the burden in steel making processes. The use of scrap has been suggested in the production of gray iron, malleable iron and electrolytic steel. It has been employed in both the cupola and blast furnace, apparently with good results.

Steel swarf and turnings are sometimes briquetted. These materials can-

not be melted directly without serious loss, in some cases amounting to as much as 40 per cent, while the losses are largely eliminated by briquetting. It is said that such briquettes, because of the greater facility with which they are handled and charged, actually obtain a premium over the market price of heavy melting steel.

Cast iron borings have also been briquetted with considerable success, it having been found that these briquettes can be melted directly with iron pro-

difficult and can be carried out satisfactorily in a pug mill or cement mixer.

In the manufacture of brass, bronze and various other non-ferrous alloys the light metal swarf problem is said to be even more serious than in the case of steel and cast iron. Losses in handling and melting the swarf of these metals are serious items, because of the relatively high value of the metals and the relatively low volatilization temperature of some of them.

According to Stillman ("Briquetting," Chemical Catalogue Company), the conversion of the swarf into briquettes has the following advantages:

Melting losses are considerably reduced.

Transportation of material to the furnace is facilitated.

The time of melting is appreciably decreased. This enables the number of heats per day to be considerably increased.

Charging is much facilitated.

These advantages are clearly shown by comparative data secured in the melting of manganese bronze chips (loose) and manganese bronze chip briquettes. Seven hundred and twenty-seven pounds of loose chips required 4 hours and 20 minutes for melting, the loss in melting being 18.8 per cent. Chip briquettes required only 3 hours and 45 minutes for melting, the melting loss being only 8.5 per cent.

Briquetting has been applied to some extent in the refining of precious metals. At the Marsac Silver Refinery in Utah, silver has been briquetted into cakes. A hydraulic press operating at 1000 pounds pressure per square inch is sufficient for this purpose. Briquettes have been made also from gold precipitates at the El Oro mines, in El Oro, Mexico. The binder is 8 per cent slacked lime moistened with a saturated solution of borax water. The briquettes are produced on an upright press.

Alloy wastes are recovered in various ways. A tin alloy is recovered from bearing metal scrap. Alloy waste containing lead, antimony, tin and other metals, but not iron, has been freed from adhering metals by treating the molten alloy one or more times with silicon or silicon alloys. In recovering waste from tin babbitting operations, metal removed

from the turning pots is agitated with steam to dress off any zinc. The tin-copper alloy remaining is used in babbitt mixtures. The zinc dross is smelted. Skimmings from the kettle; spatters and spills from the babbling operation and the like are smelted at fairly low temperatures and the zinc dressed off by steaming. The residue is smelted. Metals such as copper, zinc, iron and nickel, combined as silicates or in the free state, from slags and slimes, have been recovered by adding dilute sulphuric acid and calcium fluoride with or without nitric acid, to dissolve the metal.

Ingenious methods have been suggested for recovery of light metals and their alloys. Metals such as aluminum and magnesium and their alloys have been recovered from scrap by melting and stirring the scrap with an amount of magnesium chloride approximately equal in weight to impurities present. The impurities are collected by the magnesium chloride.

Sees Building Boom

Charlotte, N. C.—In an address at the opening session here of the fourth semi-annual meeting of the North Carolina Association of Electrical Inspectors, K. O. Kuester, manager of the Charlotte Chamber of Commerce, urged members of the Association to prepare for the "greatest construction period in history," declaring that during the next fifteen years the advancement of North Carolina will be greater than in any similar period in the past. W. M. Sullivan, chief inspector of the Charlotte Inspection Department and president of the Association, presided at the session.

Additional Ships for Citrus Fruit

Fort Pierce, Fla.—Officials of the Fort Pierce Steamship Line announce the addition of two fully ventilated ships to handle citrus fruits between this port and New York. The ships, now engaged in handling tomatoes between Central America and New York, are said to be well suited for handling citrus fruit. Sailings will be provided every five days.

Norfolk Building Increases

Norfolk, Va.—Building operations in Norfolk for the first five months of the current year show an increase of more than \$25,000, compared with figures for the corresponding period last year. From January 1 to May 31 of this year permits were issued for construction to cost \$605,032, compared with \$580,747 for the first five months of 1931.

Fallacy of Sufficiency

An expression of abiding faith in America's future in which Research was typified as the White Hope of Industry and a solemn warning against the fallacy of the completeness of things; these were emphatic points in the address of Dr. S. M. Kintner, vice-president of the Westinghouse Electric and Manufacturing Company at the opening of the engineering session of the National Electric Light Association Convention in Atlantic City.

Citing the pessimistic opinions attributed to those who in their day were considered authorities, Dr. Kintner showed that throughout the last century it was felt by some leaders of thought that the ultimate had been reached in science, chemistry, engineering, invention and economics. "I therefore would caution against the all too prevalent opinion that the world is finished, that further improvements will be minor in character and that therefore no great risk is incurred by holding back and waiting for someone else to make them." Further:

"There is too much expression of the thought, doubtless prompted by fear, that we have gone too far in the use of machinery, attributing our present economic illness to that cause. There are many expressions of opinion that we have had our best days, that never again will we have such business activity and profits.

"I submit that the developments of science and their application in engineering are not complete. Few perhaps will admit they believe such developments to be complete, yet there are many in responsible charge of larger industries who proceed as though they did so think. They lack courage, and in trying to proceed cautiously often fail to keep abreast of the march of progress.

"If management decides to forget further development for the time being it is on dangerous ground. The march of progress is relentless, a modern plant today may be quite out of date in a comparatively short time. There is nothing quite so ruthless as that which replaces. It behooves all management to keep keenly alive to the necessity of meeting changes at all times."

Commenting particularly on the effect of continued research in advancing the electrical industry, R. A. Neal, central station executive of the Westinghouse Company, said:

"Scientific research on the part of electrical manufacturers has taken no furlough in spite of general business curtailment. New engineering developments, increased efficiencies and new operating economies are made possible by new standards of accuracy, new inventions, new products and new methods, and these together with new duties for electric power to perform should enable the utilities to continue operations along the same or even a higher level of production service."

Mr. Neal expressed great confidence in the business leadership and managerial

skill of executives of the power companies and he believes the burden of making profits on reduced power consumption can be materially lightened if advantage is taken of the cost-reducing equipment developed by electrical manufacturers and now available to the industry.

Mill Hands Turn to Cooperative Farming

Cooperative production and cooperative marketing have been developed on a large scale at Picayune, Miss., under direction of L. O. Crosby of the Goodyear Yellow Pine Lumber Co. The company works a thousand men when it is in operation. Under present conditions, these men are working as hired hands or as share-croppers on the company's cut-over land. When the mill starts up again, the men will continue to do farming on part time.

Company specialists instruct these new-made farmers in growing and gathering their crops. When products arrive at the packing shed, they are graded, washed, pre-cooled in ice-water, packed according to size and quality, labelled "Pearl River Certified Products," and started rolling in refrigerated cars. Each man gets his pro-rata share of the cooperative sales.

Mr. Crosby's long-time program calls for putting the men on 40-acre tracts, where they can combine livestock raising with truck-growing. He has 234 registered Jerseys, headed by imported bulls, and is offering a bull calf from this herd in exchange for any ordinary calf. There is a canning plant to which any farmer may bring his products and have them put up at cost. There is a creamery, and a cooperative cotton gin.

These production and marketing aids are open to all farmers of the section, whether mill employees or not. Company tenants must grow one cover crop a year, and are expected to grow three other crops a year on the same land: Radishes, tomatoes and fall beans; strawberries, sweet potatoes and turnips; or Irish potatoes, cantaloupes, and fall beans.

For every acre that is tenant-farmed, the company has several acres it is operating with hired labor, giving employment to mill hands who are not share-cropping.

This program is not only tiding the company and its employees over the shut-down. It is preparing for farm and factory combination when the mills resume, setting up a solid farming community which will go on permanently, instead of leaving a barren stretch of cut-over land when the mills finally close down from exhaustion of their timber supply.

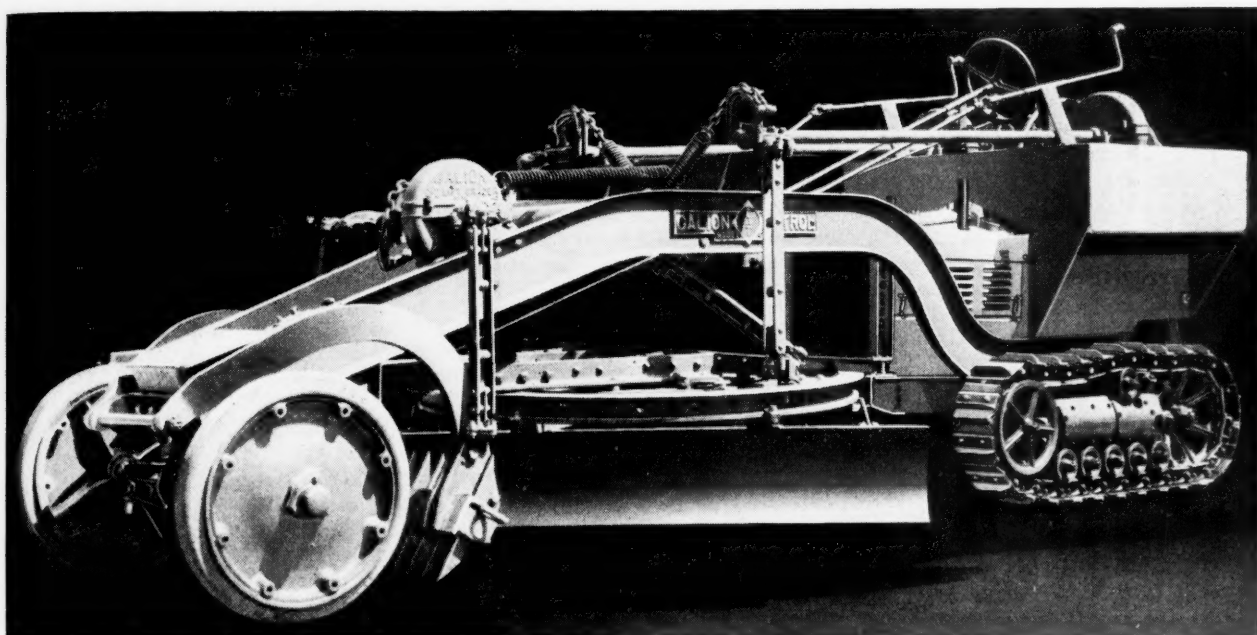
Cletracs on Highway Work

THE Cleveland Tractor Co., of Cleveland, Ohio, this spring filled an order for 50 Cletrac "15s" as power units for Galion one-man patrols for the Pennsylvania Department of Highways. The order for the tractors is the more significant when it is considered that in July, 1931, the Pennsylvania State Highway Department purchased 90 Model "80"

Cletracs and 67 Model "15" Cletracs, which was at that time the largest single purchase of crawler-type tractors ever made by any state government in this country.

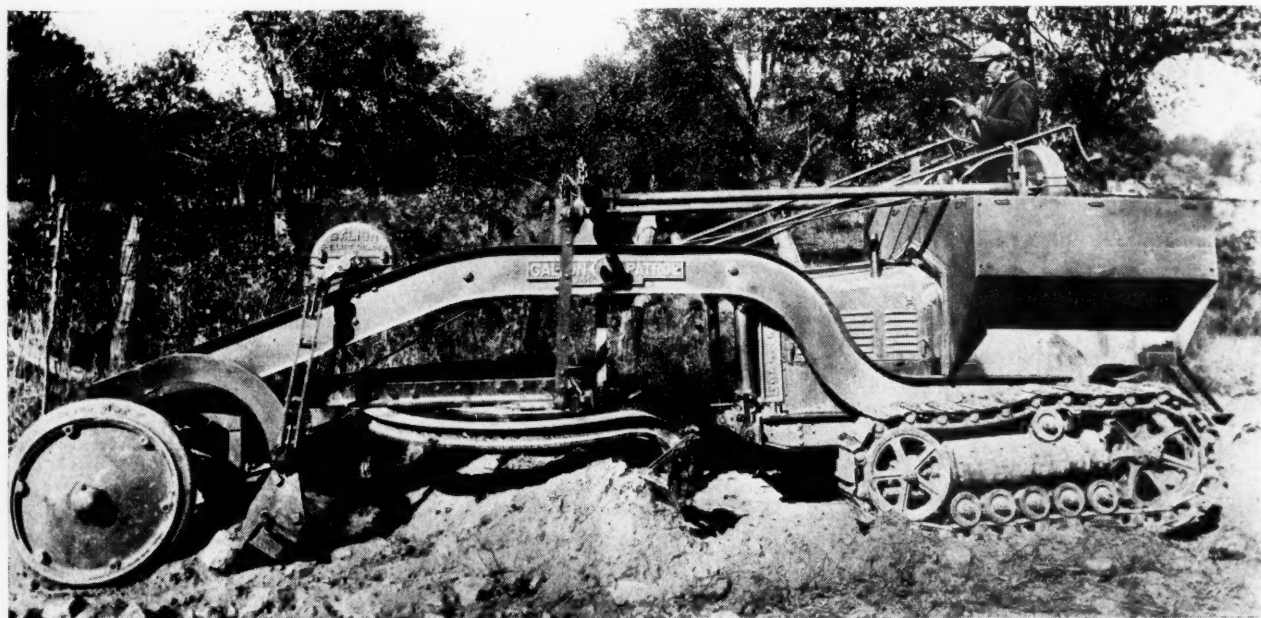
The 157 tractors delivered last year have been in operation since last September, a period of more than 100 working days. This new order brings the total purchases of Cletrac "15s" by the Penn-

sylvania Highway Department to 117, and the company is particularly encouraged "because the excellent performance of last year's tractors was an important factor in this year's purchase." These units are used in road maintenance operations in all parts of the state on one of the finest highway systems in the country, developed over a period of years of careful planning.



A Galion E-Z Life Grader Known As a One-Man Highway Patrol

A Model "15" Cletrac crawler-type tractor is the power unit for this machine, which is extensively used on Pennsylvania highways.



Cletrac "15" Powers Highway Patrol Unit

One of 117 crawler-type tractors purchased in the past two years by the Pennsylvania State Highway Department

IRON, STEEL AND METAL MARKET

Steel Output Again Declines

Pittsburgh, June 13.—(Special.)—Steel ingot production in May as officially reported was at 42,593 tons per working day or 11 per cent under the April rate. Up to April, December had been the low month. Weekly estimates of steel production have usually been fairly accurate, being confirmed by the official report, which is issued only monthly, but this time the weekly estimates indicated a slight May increase, whereas it is now seen there was a decrease.

Production last week was under the May rate, perhaps 10 per cent under. There were decreases in nearly all finished steel products and in connection with nearly all classes of demand. There have been some seasonal decreases in requirements since April, but not enough to account for the entire loss, and the trade is inclined to think that buyers have been holding off to an extent, waiting until Congress gets out of the way. In various quarters there are predictions that decided improvement will begin after the Republican convention. Steel production has regularly been lower in July than in June, but there are predictions that this year will be a reversal.

In any event, the steel trade is convinced that arrearages are accumulating as to steel actually required to keep the company going at its present rate, that facilities are being worn out faster than they are being replaced. There were a few who entertained that view in the late months of last year while now there are more because steel production is scarcely two-thirds as great now. As it would be contrary to all precedents for steel demand to increase much during the summer months, September is mentioned as the more promising as to substantial improvement. In the steel trade view, the summer ends with Labor Day.

Except for a general revision in hot rolled strip prices, involving a new card of extras and a new base price, all steel prices are being continued for third quarter at the recent level. A month and more ago there was much talk of advances, in connection with the general stabilizing movement. While the producers feel they should have better prices, as they have substantial losses, they recognize that it would not be good form to attempt advances at this time, when demand is so light and other important commodities are by no means advancing. Whether the co-operative spirit in the trade would prove strong enough to support advances is a question. In some lines it has developed that prices

of late have not been as rigid as supposed.

Lake Superior iron ore prices are announced for the season at no change from the schedule of the last three years. The usual opening is made by sales, but this year there was no inquiry. Even in active times, very little ore moves in the open market but the price is important because consumers control some of their ore by stock ownership in mining companies.

Duty Placed on Copper

New York, June 13.—[Special.]—The passage of a 4-cent duty on copper as a part of the revenue bill and the stiffening of copper prices has been the high light of the metals markets during the past week. The minimum copper price of 5½¢ per pound disappeared in favor of 5¼¢ and the metal was becoming scarce at that figure as the week wore on. Purchasing of copper on the part of domestic consumers improved though export sales were held down to the usual average of 250 tons daily.

The price of zinc ore has risen another \$1 per ton in the tri-State district after a rise the preceding week by \$4 per ton, the strength of this market being due to the curtailed production. Prime western slab zinc has been steady in the main, with the tendency, however, toward easiness. Lead prices are unchanged as they have been since late in March. Demand has been quiet, however, by contrast to other recent weeks and there are evidences of consumers having overbought in April as they are now asking that deliveries be postponed.

The tin market was affected adversely by the failure of a large London tin house. Trading in tin was suspended on Monday on the London Metal Exchange because of this event, an unprecedented procedure. However, a pool was formed to absorb the surplus tin which would have been dumped on the market and trading was resumed the next day. Tuesday's tin price declines were moderate but became more severe as the week progressed.

Genuine improvement among the metals of course awaits betterment in the industrial situation generally. Steel operations have fallen off rather sharply to 20 per cent of capacity. Purchasing of raw materials on the part of the automobile industry is on the wane. Only Ford is still increasing his output, the present production being about 5000 cars daily. Judging by the brisk demand for

fabricated structural steel, the best since October, building operations are on the increase, at least Governmental construction, which implies a larger consumption of metals in that direction. Tin plate production has been gaining, which means a better consumption of tin.

Looking Ahead

Birmingham, June 13.—[Special.]—Looking to the future, W. D. Moore, president of the American Cast Iron Pipe Company, quotes from an estimate of the American Water Works Association as to the survey showing need for large quantities of pipe for various developments throughout the country for extensions and new systems, and expresses the opinion that with financial aid from the government, there should be purchases of pipe which would call on the industry to operate 100 per cent, taking three years or more to fill the orders.

In other circles an opinion obtains that with financial aid much needed work could be pushed, with a healthy purchase of material.

Structural steel fabricating shops are receiving a number of small tonnage orders, the aggregate giving employment to more than 50 per cent of the labor forces at about 30 per cent capacity. The Birmingham shop of the Virginia Bridge & Iron Co. will fabricate 350 tons of steel for a bridge in Kendall County, Texas, a highway structure, and will furnish 446 tons of steel for the new postoffice and courthouse at Meridian, Miss. This shop also furnished 1000 tons recently for the postoffice and courthouse under construction at Montgomery, Ala., and 3100 tons for the new bridge over the Ohio river on the Louisville & Nashville Railroad at Henderson, Ky. Steel for three or four buildings for the University of Texas is being fabricated in Birmingham and orders are on hand for bridges in California and elsewhere.

Birmingham contractors are bidding on the railroad construction offered by the Meridian and Bigbee Railroad, which is to be extended some 25 miles into Alabama connecting with the Louisville & Nashville Railroad line in Marengo county. Contractors here are low bidders on government work along the Mississippi river at Helena, Ark.

Small shapes of steel are being made in greater quantity than some of the heavy shapes, stock of cotton ties being worked up in anticipation of an active demand a few months hence.

ET

NEW AND IMPROVED EQUIPMENT

Adams Elevating Grader for Heavy Duty

A new heavy-duty elevating grader, with new and exclusive features, is announced by the J. D. Adams Company, Indianapolis, Ind. This machine, known as Elevating Grader No. 11, has a distinctive new frame, front axle and plow beam design, and 48-inch carrier. Carrier and plow controls are power operated. Frame and front axle construction eliminates the usual fifth wheel and provides better stability and balance to handle the long and wide carrier for which the machine is designed. The plow beam takes draft directly at tongue

connection on the front axle, doing away with bars and chains. Of exceptional rigidity and light draft, the carrier is equipped with shaft and gear drive, has ball bearings throughout, and provides greater carrying capacity. It is available in 19-foot, 22-foot and 25-foot lengths. The operator, from his position at the plow, has control of the upper carrier, center of carrier, lower carrier and plow, all being raised and lowered by power through enclosed gears. Power for operating carrier and controls is supplied by auxiliary engine or tractor power take-off as desired. Auxiliary engine drive is declared to be more popular, using a new improved McCormick-Deering power unit.

Motor Controlled Elevating Grader. Inset Shows Power Control Box and Operating Levers



Milliken Valve

An improved a.c.f. Milliken Valve, having only seven parts, has been announced as a recent and important development by engineers of the American Car and Foundry Company, New York. This valve has been in use a number of years and was originally made with a movable gland in the head, the head being held to the body by gland bolts. Recently the design was improved and it is now manufactured with a solid head construction, avoiding the use of glands, gland bolts, bonnets or stuffing boxes, and employing no packing or gaskets of any kind. Of unusual simplicity, the valve opens and closes with a quarter turn against a positive stop. There are no seats to cut. Face-to-face dimensions of the flanged valves are the same as standard gate valves, so that a.c.f. Milliken valves may be introduced without

changing pipe lines. Castings for the valves are made in the Detroit foundry of a.c.f. of "Nicrofer," a semi-steel, nickel, chromium composition. Industries served by these valves include: Oil refineries, bulk and terminal plants, natural and artificial gas lines, soap works, by-product coke plants, pulp and paper mills, cement plants, chemical works, dye and cleaning plants, rayon works and paint and varnish plants.

Day "Jaw Type" Rock Crusher

During the past few months the Day Pulverizer Company, Knoxville, Tenn., manufacturers of crushing and pulverizing machinery, have developed the Day tractor drawn and operated "Jaw Type" rock crusher for use with Monarch and Cletrac tractors in addition to the crusher for use with Caterpillar tractors.

Day portable crushers are specially designed to furnish low-cost crushed material for states, counties and townships, as well as for road and bridge contractors. Noteworthy features of the machines are safety side speed, simplicity of construction, ease of adjustment, no belt slippage and short turning radius.

Globe Valves From Carbon Steel

In addition to their regular line of bar stock valves, the Reading-Pratt & Cady Company, Inc., Bridgeport, Conn., now offer 3/4-inch and 1-inch globe valves, precision turned from high grade carbon steel, recommended for services where high strength and close control are desirable features. With stainless steel slip-on renewable discs and screw-in seats, stems are especially designed and treated for temperature service. Smaller sized carbon steel valves, in both globe and angle patterns, have integral seats and discs. Working pressures are 4000 pounds at 150 degrees Fahrenheit, 600 pounds at 500 degrees Fahrenheit. Valves may be furnished, in addition to the standard line, with indicator handwheels, lock shield and key, male or female unions and male and female ends. There is also a manifold type consisting of three valves on a single body.

Carelessness Is Costly

It is to the interest and ultimate profit of all those who own motor trucks or who are responsible for their operation to build up and maintain a staff of competent and careful drivers. To that end, an accurate record should be kept of the performance of each driver, says H. R. Cobleigh, of the Motor Truck Division of the National Automobile Chamber of Commerce. Whether desired or not, the owner of a motor truck is often given favorable or unfavorable advertising, based on the courtesy and efficiency of the operator of the machine. And recklessness is costly. Finally, efforts to win the public on the ground of service will not succeed so long as motor trucks are regarded as a menace or even as a nuisance on the highways.

White Sulphur Springs, W. Va.—At a meeting here of the National Fertilizer Association, the following officers were elected: Bayless W. Haynes, Jacksonville, Fla., president; John J. Watson, New York, vice-president, and Charles J. Brand, Washington, D. C., executive secretary and treasurer.

CONSTRUCTION DEPARTMENT and NEW ENTERPRISES

Covering the initial announcements of new undertakings with additional information about enterprises previously mentioned. The date at the end of an item indicates preliminary facts were given in a previous issue.

Building and Construction Proposed and Contracts Awarded; Manufacturing, Mining, Power, and Land Developments; Public Works; Transportation; Communication; Financial Enterprises; New Business Opportunities Reported in the Sixteen Southern States.

When writing to a new firm or corporation the name of at least one of the incorporators should be placed on the envelope to expedite its handling by the local postoffice. Mail may be delayed unless complete address is given.

The Daily Construction Bulletin gives each business day advance news published in this weekly review. It is invaluable to those requiring prompt information. Subscription price \$40.00 a year.

Airports, Airplane Plants, Etc.

Fla., Miami—Pan-American Airways, Miami, J. E. Yonge, Atty., reported, contemplates constructing passenger terminal building at cost of \$225,000 and 2 additional hangars, at Dinner-Key base on S. Bayshore Drive, contingent on Government's approval of dredging channel approach in Biscayne Bay, 100 ft. wide and 6 ft. deep to seaplane base.

La., Barksdale Field, Shreveport—See Want Section—Bids Asked.

La., Barksdale Field—Capt. Geo. E. Lamb, Constructing Q. M., receives bids June 23 for primary feeder duct and transformer bank for field sewerage pumping plant, including labor, material and installation.

La., New Orleans—Lester F. Alexander Co., Inc., Audubon Bldg., has contract at \$68,850 for constructing and placing approximately 33,000 square yards of fascine mattresses ballasted with 7500 square yards of rip rap stone as sub-aqueous protection work at outer end of Shushan Airport at Lake Pontchartrain; John Klorer, 606 Common St., Ch. Engr. Levee Bd. 6-9

Mo., Jefferson City—Jefferson City Airport, incorporated; A. Linxwiler, N. R. Beggie.

Mo., Kansas City—Aeronautics, Inc., chartered; Conrad H. Mann, Com. Bldg.

Mo., Robertson—Flying Field Associates, Inc., chartered; R. S. Damon, 110 N. Elizabeth St., Ferguson; Geo. A. Page, 21 Alameda Place; operate flying fields.

Mo., Springfield—Ozark Airways, Inc., George M. Prescott, 1151 S. Ferguson St., Pres., negotiating for 106 acres James River Club Rd. for airport improvements.

Okla., Blackwell—City Dwight Randall, Clk., constructing airport; J. B. Klein Co., Oklahoma City, has contract for steel. 5-26

Va., Langley Field—See Want Section—Bids Asked.

Bridges, Culverts and Viaducts

Proposed Construction

FLORIDA—State Road Dept., Tallahassee, considering reconstructing Stevenson Creek bridge, at Clearwater.

LOUISIANA—Louisiana Highway Comsn., N. E. Lant, Bridge Engr., Baton Rouge, advises plans are completed for bridge over Bonnet Carré Spillway on Airline Highway; conc. pile trestle bridge approximately 7000 ft. long, with hydraulic dredged embankment approaches about 3000 ft. long; clear roadway width 40 ft.; not to be advertised for bids until award is made by Government in the expropriation proceedings.

LOUISIANA—House of Representatives approved bill allowing Louisiana Highway Comsn., Baton Rouge, to bridge Pearl River near Pearlinton, Miss.

MISSOURI—See Roads, Streets and Paving.

TEXAS—State Highway Dept., G. G. Wickline, Bridge Engr., Austin, advises no definite date set for receiving bids for Intracoastal Canal bridge, Chambers-Galveston County line, S. P. 232-B.

Tex., Amarillo—Potter County and State Highway Comsn., Austin, considering replacing bridge over Canadian River, Hwy. 5; \$80,000.

Tex., Beaumont—Jefferson County Com-

mrs. Court, B. B. Johnson, County Judge, probably receive bids about July 1 for bridge over Intracoastal Canal on Port Arthur-Sabine Hwy.; special bascule type span, clear span 100 ft., 20 ft. roadway, one 4-ft. walk; steel and conc., known as Scherzer Rolling Lift type; Craig P. Hazelet, Pres., Scherzer Rolling Lift Bridge Co., 53 W. Jackson Blvd., Chicago, designing engineer. 6-9

Tex., Fort Worth—City, G. Fairtrace, City Mgr., and Texas & Pacific Railway Co., E. F. Mitchell, Ch. Engr., and St. Louis, Southwestern Railway Co., W. S. Hanley, Ch. Engr., Tyler, reported, probably take bids July 15 for steel, rein. conc. viaduct in grade crossing elimination program; 566 ft. long; E. F. Mitchell, in charge.

VIRGINIA—Department of Highways, C. S. Mullen, Ch. Engr., Richmond, opens bids June 28 for projects in following counties:

Botetourt—66 ft. bridge over Lapsleys Run, Route 17, 3.3 mi. from Eagle Rock, F637B2, 2 30-ft. conc. beam spans, 90.2 cu. yd. A conc., 184.4 cu. yd. B conc., 18,625 lb. rein. steel;

Caroline—156-ft. 6-in. bridge over Matta pond River, 6.7 mi. from Bowling Green, S448B1, 1 20-ft. and 1 40-ft. steel beam span and 1 90-ft. steel truss span, 207.3 cu. yd. A conc., 29,300 lb. rein. steel, 123,500 lb. struc. steel, 630 lin. ft. treated piles, 900 lin. ft. untreated piles;

42 ft. 6-in. bridge over Polecat Creek, 7 mi. from Bowling Green, Route 50, S448B2, 1 40-ft. rein. conc. beam span, 59.6 cu. yd. A conc., 131.6 cu. yd. B conc., 16,005 lb. rein. steel, 1980 lin. ft. untreated piles;

Craig—90-ft. bridge over Johns Creek, 4 mi. from Newcastle, Route 22, S479B, 1 90-ft. steel beam span, 58.4 cu. yd. A conc., 437.5 cu. yd. B conc., 12,045 lb. rein. steel, 97,000 lb. struc. steel.

W. Va., Wellsburg—Mount Vernon Bridge Co., Mount Vernon, Ohio, reported, endeavoring to obtain renewal of Congressional permit to construct toll bridge over Ohio River near Wellsburg.

Contracts Awarded

Ga., Atlanta—Flagler Co., Red Rock Bldg., demolishing old Whitehall Street viaduct preparatory to erecting new steel and conc. span. 3-31

Md., Friendsville—American Bridge Co., 71 Broadway, New York, has contract for 120 tons fabricated struc. steel for highway bridge; Mullan Contracting Co., 3945 Greenmount Ave., Baltimore, Contr.

Missouri—Stupp Brothers Bridge & Iron Co., 2800 Weber Rd., St. Louis, has contract for 190 tons fabricated struc. steel for bridges in Pemiscott and Christian counties.

Missouri—Wabash Railway Co., E. L. Cruger, Ch. Engr., St. Louis, reported, awarded contracts for 500 tons fabricated struc. steel for bridges to American Bridge Co., New York, McClintic-Marshall Co., Pittsburgh, Stupp Brothers Bridge & Iron Co., 2800 Weber Rd., St. Louis, and Mississippi Valley Structural Steel Co., 3117 Big Bend Rd., St. Louis.

OKLAHOMA—See Roads, Streets and Paving.

Okla., Blackburn—J. B. Klein Iron & Foundry Co., 1004 W. 2nd St., Oklahoma City, has contract for 400 tons fabricated struc. steel for bridge over Arkansas River.

Okla., Hammond—Petroleum Iron Works, Beaumont, Texas, has contract for 198 tons structural shapes for bridge; W. R. Johnson, Contr., Weleetka.

TEXAS—See Roads, Streets and Paving.

Texas—Houston Structural Steel Co., 3910 Washington St., Houston, has contract for 455 tons fabricated struc. steel for bridge in Bexar and Guadalupe counties.

Texas—Virginia Bridge & Iron Co., Roanoke, Va., has contract for 355 tons fabricated struc. steel for highway bridge.

Canning and Packing Plants

Ga., Washington—Wilkes County Co-Operative Creamery, H. W. Paschal, Mgr., let contract for equipment for canning plant.

Tex., Denton—Lamb-Whitson Food Products Co., incorporated; W. P. Whitson, J. W. Lamb.

Tex., Riverside—Riverside Packing Co., incorporated; John Edward Hunter, Guy R. Hunter.

Clayworking Plants

Miss., Charleston—Mississippi Clay Co., Inc., J. W. Saunders, Pres., reported, acquired clay, tile and other mineral rights on 3000 acres; establish plant in next 6 months to manufacture pottery, terra cotta and porcelain. 11-19

Mo., Kansas City—Southwestern Terra Cotta Co., incorporated; R. Stipzengel, 333 Barnett St.

Coal Mines and Coke Ovens

Mo., Springfield—Republic Coal Corp., capital \$25,000, incorporated; Charles Strevell, Springfield; Thomas Branson, Republic.

Drainage, Dredging and Irrigation

Florida—Clint Moore, Delray, low bidder at .057 cent per cu. yard for dredging 916,596 cu. yd. in waterway near Ponce de Leon Inlet. 5-12

Maryland—U. S. Engr. Office, Wilmington, Del., let contract to S. D. Collins, Port Penn, Del., for constructing 22 mooring dolphins and 1008 lin. ft. of boardwalk along Inland Waterway from Delaware River to Chesapeake Bay, Delaware and Maryland. 5-5

Md., Baltimore—See Want Section—Bids Asked.

Missouri—U. S. Engineer Office, Memphis, Tenn., received low bid from Forecum-James Co., Dyersburg, Tenn., for constructing levee protection work on Ramsey Creek Drainage Canal, Little River Drainage Dist., Scott County. 5-26

Electric Light and Power

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

Ark., Fort Smith—City will have additional street lights installed in Stough Electric Park addition by Mississippi Valley Power Co.

D. C., Washington—Following estimating

on Central Heating Plant steam distribution system extending from central heating plant to various public buildings, bids opened June 23: M. Cain Co., 3315 8th St., N. E.; Frederick L. Cranford, Constitution Ave., N. W.; Grinnell Co., Munsey Bldg.; Standard Engineering Co., 2129 I St., N. W.; George A. Fuller Co., Woodward Bldg., all Washington; Ligon & Ligon, 3310 Ridge-wood Ave., Baltimore, Md.; W. G. Cornell Co., Empire State Bldg., New York, and 1003 K St., N. W.; Washington; Daniel J. Keating, 613 S. 24th St.; Frederick Snare Corp., 1524 Chestnut St.; Standard Piping & Fitting Co.; W. K. Mitchell & Co., 29th and Ellsworth Sts., all Philadelphia, Pa.; Gillis & Geoghegan, 537 W. Broadway; W. McKee, 225 Broadway; Midwest Piping & Supply Co., 30 Church St.; Almirall & Co., 53 Park Place, all New York; Power Piping Co., B. Floersheim & Co., Farmers Bank Bldg.; J. C. Fullman, 528 First Ave., all Pittsburgh, Pa.; Ryan Co., 4500 Division St.; Duffy-Noonan Construction Co., 176 W. Adams St.; W. A. Kollie Co., 100 N. LaSalle St., all Chicago, Ill.; Frank J. El-singer, 820 President St., Brooklyn, N. Y.; F. J. Conway, 205 Ferguson Ave., Hilton Village, Va. 6-2

D. C., Washington—Public Buildings and Parks Comsn., Navy Bldg., receives bids June 21 for heating plant and conc. tunnel, D and 20th Sts., N. W. (West Central Heating Plant): 90x180 ft.; rein. conc.; brick and steel; 98 ft. brick stack; 4300 ft. of conc. tunnel; five 1000 h. p. boilers and all necessary pumps, fans, oil tanks and other equipment. Following contractors estimating: George A. Fuller Co., Munsey Bldg.; A. L. Smith & Co., 2539 Pennsylvania Ave.; John W. Cowper Co., Natl. Press Bldg.; B-W Construction Co., Natl. Press Bldg.; Rust Engineering Co., District Natl. Bank Bldg., all Washington; Frank Pecora Construction Co., 4006 Eldorado Ave.; P. C. Streett Engr. Co., 404 St. Paul St., both Baltimore, Md.; Virginia Engineering Co., Newport News, Va.; H. J. Osterfield Co., 413 S. Main St., Dayton, O.; Union Iron Works, Erie, Pa.; Standard Arch Co., Frostburg, Md.; Hamilton Engineering Co., Charlotte, N. C.; Barnett Bros., 1282 Abbott Rd., Buffalo, N. Y.; Drake Avery Co., 147 Woodridge Ave., Detroit, Mich.; Almirall & Co., 53 Park Place; American Arch Co., 60 E. 42nd St.; Midwest Piping & Supply Co., 30 Church St.; Combustion Engineering Co., 200 Madison Ave., all New York; Frank J. El-singer, 820 President St., Brooklyn, N. Y.; Wm. A. Kollie Co., 100 N. LaSalle St., Chicago, Ill.; Hughes-Foulkrod Co., Schaff Bldg., Philadelphia, Pa. 6-2

Ga., Waycross—City, L. V. Beane, City Mgr., receives bids July 5 for complete street lighting system, including material and erecting.

Mo., Osceola—City, Charles H. Hutsler, Mayor, defeated \$30,000 bond issue for lighting system; may call new election.

Okla., Paden—Oklahoma Gas & Electric Co., 321 N. Harvey St., Oklahoma City, reported, granted 25 yr. franchise, acquired city transmission and distribution lines and substation.

Va., Culpeper—Virginia Public Service Co., Charlottesville, advises plans still in preliminary stage for rebuilding burned power and ice plant; will use equipment already on hand in other plant to great extent. 5-12

Va., Richmond—See Want Section—Bids Asked.

Flour, Feed and Meal Mills

Ga., Statesboro—A. E. Smith Grain Co., constructing 1 story, brick, open joist cotton warehouse.

Mo., Kansas City—Union Grain Corp., capital \$24,000, incorporated; Ralph H. Orthwein, Merchants' Exchange.

Foundry and Machine Plants

La., Shreveport—Shreveport Properties, Inc., Orleans Parish, acquired W. K. Henderson Iron Works and Supply Co., 100 Caddo.

Tex., Amarillo—Crescent Foundry Co., L. Stapf, erect iron clad foundry 1210 S. Johnson St.

Garages and Filling Stations

Ark., Little Rock—Reo Motor Sales, Inc., chartered; V. G. Savage, 1808 Beechwood St.

D. C., Washington—Milton E. Groome, Chandler Bldg., let contract to Martin Bros., 1341 Connecticut Ave., to erect filling station 1141 Bladensburg Rd., N. E.; 1 story; brick; metal tile roof; J. E. W. Sohl, 1336 New York Ave., Archt.

Fla., Lake Worth—Worth Motor Co., incorporated; E. Poland, D. D. McNail.

Fla., Macclenny—Powers Chevrolet Co., incorporated; H. F. Powers, W. F. Wells.

Fla., Sarasota—Cooke Motor Co., incorporated; M. E. Cooke, E. E. Gridley.

Fla., West Palm Beach—Barco Motor Co., incorporated; G. C. Barco, P. F. Hull.

Md., Baltimore—Sherwood Bros., Baltimore Trust Bldg., considering erecting filling station Park Heights Ave. & Hayward St.; 1-story; brick and stucco; may take bids in the fall; R. I. Walsh, Archt., care owners.

Md., Baltimore—Man. J. Klemm & Sons, Eastern Ave. & North Point Rd., have contract for roofing and sheet metal work on filling station Philadelphia Rd. and Conkling St., for Lord Baltimore Filling Stations, Inc.; Fidelity Engineering Co., Contr., 6300 Belair Rd. 5-5

Md., Baltimore—Standard Oil Co., Franklin and St. Paul Place, erect addition to filling station 3300 Philadelphia Rd.; 1 story; brick.

Miss., Biloxi—H. M. Jernigan erecting South Way service station on West Beach St.

Md., Salisbury—Cavanaugh & Ludwig, Inc., chartered; Pat H. Cavanaugh, Harry Ludwig.

Mo., Kansas City—Sullivan Chevrolet Co., capital \$50,000, incorporated; Wm. J. Sullivan, 3411 Gilham Rd.

Mo., Kansas City—Jno. A. Butler, Inc., capital \$25,000, incorporated; John A. Butler, Lathrop Bldg.

Mo., St. Louis—St. Louis Armature Service Co., incorporated; John Kern, 4238 College St.

Tenn., Nashville—Mullins Auto Repair Co., 423 Seventh Ave., S., acquired Fisher Garage Co., Inc., 102 Second Ave., N., will operate under name of Mullins Storage & Repair Co.

Tex., Bellville—Jahnke Motor Co., incorporated; R. H. Jahnke, F. A. Ruland.

Tex., Dallas—Safety Service Stations, Inc., chartered; J. Rice, Rep. Bank Bldg.

Tex., Dallas—J. B. Nichols Taxicab Co., incorporated; J. B. Nichols, 4524 Walker St.

Tex., Houston—Pace Tire Co., Main St. and Calhoun Ave., merged with Batterson Tire Service, Inc., will operate as Batterson Tire Service, Inc., C. K. Batterson, Pres., S. W. Cor. Leeland Ave. & Caroline St.

Tex., Houston—Newark Oil Co., incorporated; E. Hollingsworth, 1649 W. Main St.

Va., Waynesboro—Ivey Motor Co., Inc., capital \$15,000, incorporated; Edwin G. Ivey.

W. Va., Wheeling—John L. Earnest Co., 1107 Market St., erecting \$28,000 service station for Standard Oil Co. on National Rd. at Byrd Ave. and Bedillion Lane.

Gas and Oil Enterprises

Ark., Camden—Globe Pipe Line Co., capital \$100,000, incorporated; L. W. Bower, Leonard Smead.

Fla., Jacksonville—Protane Natural Gas Co., incorporated; A. W. Markham, 3912 Notter Ave.

Ky., Mayfield—Mayfield Kentucky Gas Co., A. A. Whitlock, Mgr., constructing Butane gas plant.

Md., Baltimore—Coastwise Petroleum Co., I. E. Schwartz, Munsey Bldg., let contract to J. H. Bopst, Industrial Piping & Engineering Co., Court Square Bldg., for 14 steel tanks 1300-17 Marriott St.; 10 tanks, 12 ft. in diam., 30 ft. high; two 30 ft. in diam., 25 ft. high; two 35 ft. in diam., 30 ft. high.

Mo., Kansas City—Clinton Gas & Distributing Co., incorporated; F. C. Millsbaugh, 3826 Hyde Park.

Okla., Oklahoma City—Mid-Continent Drilling Co., Inc., chartered; Bert Aston, Perrine Bldg.

Okla., Oklahoma City—Swastika Petroleum Co., incorporated; Wm. H. Atkinson, Geologist Contl. Bldg.

Okla., Oklahoma City—Haggards', Inc., capital \$25,000, incorporated; J. A. Haggard, 2764 W. 20th St.

Tex., Brady—Empire Southern Gas Co., lay additional 5 mile gas mains.

Tex., Brownwood—Ray D. Galston, Tyler, and associates, reported, completed survey for natural gas line Brownwood to Lampasas.

Tex., Dallas—Bar Hunt, Inc., capital \$12,000, incorporated; Francis F. Bokern, 5122 Miller St.

Tex., Dallas—M. H. Marr, Inc., chartered; Wm. T. Earnest, Wilson Bldg.

Tex., Fort Worth—West Texas Production Co., incorporated; S. H. Casteel, 2500 University Dr.

Tex., Fort Worth—Gem Oil Co., capital \$25,000, incorporated; W. C. Josey, D. W. Josey, Texas Hotel.

Tex., Gladewater—Mar La Fay Oil Corp., incorporated; D. J. Everett, Carl B. Everett.

Tex., Houston—Mound Creek Oil Co., capital \$30,000, incorporated; Raymond Dickson, Grt. Sou. Bldg.

Tex., Houston—Waitex Products Corp., incorporated; J. L. Parker, 811 Ridge St.

Tex., Houston—H. R. Cullen Co., capital \$50,000, incorporated; H. R. Cullen, 2nd Natl. Bank Bldg.

Tex., Kilgore—Landes, Inc., capital \$10,000, incorporated; A. N. Landes, L. M. Landes.

Tex., Longview—Bonds & Dillard Drilling Co., capital \$40,000, incorporated; P. B. Bonds, R. L. Dillard.

Tex., Laredo—Atlas Production Co., incorporated; Jos. S. Morrin, W. W. Allen.

Tex., Laredo—Oso Drillers, Inc., capital \$10,000, incorporated; L. F. Judkins, E. Karg.

Tex., San Antonio—Elu Oil Co., incorporated; Dr. F. P. Herff, Nix Prof. Bldg.

Tex., Tyler—Hunt Production Co., incorporated; H. L. Hunt, P. G. Lake, Roy Lee.

Tex., Wichita Falls—Orient Gas & Oil Co., capital \$20,000, incorporated; James G. Oakley, W. F. Davis.

W. Va., Huntington—Hisey Gas Co., capital \$20,000, incorporated; D. Ross Campbell, 908 Ninth Ave., Huntington; E. A. Hatcher, Hamlin.

W. Va., Morgantown—Trans-Allegheny Corp., incorporated; Nat C. Burdette, 254 High St.

Ice and Cold-Storage Plants

Ark., Hope—City voted an appropriation of \$15,000 for establishing ice plant.

Mo., Kansas City—Crystal Carbon Ice Co., 805 Chambers Bldg., reported, construct \$50,000 dry ice manufacturing plant.

Tex., Eagle Pass—Crystal Ice Factory, A. Kifuri, constructing ice plant, daily output 100 tons.

Tex., Gilmer—Gilmer Ice & Cold Storage Co., capital \$12,000, incorporated; J. W. Croley, C. T. Crosby.

Tex., Henderson—Henderson Ice Co., capital \$20,000, incorporated; S. B. Hayter, J. R. Gray.

Land Development

Ark., Arkadelphia—Arkadelphia Land Corp., incorporated; A. J. Vestal, H. L. Petty.

Fla., Delray Beach—Naeco Realty Co., Inc., chartered; H. A. Hubbard, H. B. Adams.

Fla., Lakeland—Meyer Grove and Realty Co., incorporated; C. Meyer, H. Meyer.

Fla., Miami—Tavern Investment Co., incorporated; A. Rauzin, 719 1st St., Miami Beach.

Fla., Miami Beach—Bay Road Realty Co., incorporated; P. Kunschick, B. W. Chase, Jr.

Fla., Palm Beach—Loma Corp., incorporated; J. A. McNaughton, W. B. F. Rogers.

Fla., Sebring—Byrd Place Co., incorporated; D. S. Skipper, V. Skipper.

Fla., West Palm Beach—Norcar Palm Beach Co., incorporated; J. C. Bills, Jr., L. B. Miller.

La., New Orleans—Fort Pipes, 1524 State St., develop 3200 acres in Oakdale.

La., Oakdale—Charles Gantier has contract for clearing 600 acres cutover land between Oakdale and Glenmora for colonization project; Rev. Francis Gross, 2445 N. Washenaw Ave., Pastor of St. Mary's Catholic Church, Chicago, Ill., interested.

Md., Baltimore—MacCarthy Co., 718 Richmond Ave., incorporated; Thomas P. MacCarthy, Sam B. Smith.

Md., Baltimore—Curtis Bay Development Co., 2400 Baltimore Trust Bldg., incorporated; A. Stanley Zell, J. Frank Crouch.

Mo., Clayton—Elmlee Realty Co., capital \$75,000, incorporated; David Schmid, L. Peter Wetzel.

Mo., Kansas City—Bondholders Realty Co., incorporated; E. E. Carpenter, 640 W. 52nd St.

Mo., Kansas City—Goar Corp., capital \$25,000, incorporated; J. E. Goar, 3600 Madison St.

Mo., St. Louis—Florida-Texan Citrus Fruit Co., incorporated; T. W. Hughes, 3529 Franklin St.

Mo., St. Louis—Bd. of Estimates and Apportionment develop 68 acres for playground

and park, at Lay and Litzinger Rds., St. Louis County.

Mo., St. Louis—Fairgrounds Hotel, Inc., Boatman's Bank Bldg., chartered; Alfred Fairbanks, James V. Frank.

Mo., Windsor—Rusk Poultry Farms, capital \$100,000, incorporated; E. L. Rusk, I. Goodwin Walters.

N. C., Brevard—South Atlantic Realty Corp., capital \$25,000, incorporated; Judson McCrary, A. H. Houston.

S. C., Columbia—Lake Spears, Inc., chartered; Ware Carns, L. E. Scott.

S. C., Rock Hill—Lincoln Cemetery Assn., incorporated; H. J. Martin, A. M. Beaty.

Tex., Asherton—J. G. Sullivan Plant Farms, Inc., capital; J. G. Sullivan, K. S. Bridges.

Tex., Houston—Residential Realty & Rental Co., capital \$20,000, incorporated; Julian A. Weslow, State Natl. Bank Bldg.

Va., Norfolk—Brocke-Boush Corp., chartered; W. A. Charters, 826 W. Princess Anne Rd.

Va., Norfolk—Portlock Holding Corp., capital \$25,000, incorporated; W. P. Butt, 735 Grambray St.

W. Va., Beckley—Fairland Realty Co., incorporated; O. C. Canterbury, M. J. Meadows.

W. Va., Huntington—Eighth Street Realty Co., incorporated; H. K. Mitchell, 927 12th St.

W. Va., Parkersburg—Lee Hill Corp., capital \$25,000, incorporated; G. H. Nicholson, D. S. Dudley.

W. Va., Salt Sulphur Springs—Old Salt Sulphur Springs, Inc., capital \$10,000, chartered; P. E. Holz, Davis Creek and Spring Hill Rd., Charleston.

Lumber Enterprises

Ga., Savannah—Oconee Naval Stores Co., incorporated; E. A. McWhorter, Savannah Bank & Trust Bldg.

Mo., Neosho—George Cooksey Lumber Co., incorporated; George Cooksey, L. T. Stewart.

Tex., Houston—West End Lumber Co., 3526 Washington St., increased capital to \$30,000.

Tex., Houston—Tomlinson-Miller Lumber Co., incorporated; H. E. Tomlinson, 2022 W. Main St.

Mining

Mo., Kansas City—National Rock Asphalt Co., capital \$30,000, incorporated; J. O. Miller, L. C. Miller, both Independence.

N. C., Franklin—Industrial Minerals Corp. of America, Philip S. Hoyt, Pres., Scott-Griffin Hotel, advises are prospecting cyanite properties and making some pilot mill tests of ores and working out flow sheet for commercial deliveries; not ready to consider bids for buildings. 5-26

Tex., Three Rivers—Three Rivers Sand & Gravel Co. incorporated; E. H. Hays, B. J. Carroll.

Miscellaneous Construction

D. C., Washington—See Want Section—Bids Asked.

D. C., Washington—Dist. Commrs., reported, let contract to Potomac Con. Co., 1426 G St., S. E., for boat shed extension at Wharf No. 6 and misc. wharf work, Water St., S. W.

Florida-Georgia—War Dept., U. S. Engr. Office, Florida Theatre Bldg., Jacksonville, L. V. Frazier, Lt. Col., Corps of Engineers, District Engr., advises regarding Trans-Florida Canal survey, original survey, authorized for ship canal, has been extended to include survey to determine best location for and cost of barge canal; field work at present being limited to preliminary traverse and level lines, wash boring to determine character of overburden and depth to rock, and stream flow measurements; work at progress on compilation and study of water supply and other data, and collection of current shipping data from all Gulf ports; completion of surveys estimated to require from 18 months to 2 years. 6-9

Fla., Lake Worth—Lake Worth Inlet Comsn., George Brockway, Engr., soon call for bids for work on north jetty; will elevate to above water level at east end.

La., New Orleans—U. S. Engr. Office, foot of Prytania St., receives bids June 27 for restoring rain and wave wash dressing and sodding approximately 202 stations of levee in Second New Orleans District; information on application.

Miss., Hattiesburg—Ernest E. Russell, has contract for spillway at Kamper Park, for city.

Mo., St. Louis—Smith-Cooke Construction Co. have contract for pedestrian subway beneath Market St. from southeast corner of intersection of 12th Blvd. to northeast corner to connect with existing tunnel.

Tenn., Memphis—U. S. Engr. Office, Box 98, received following low bids for 10,700 ft. conc. wall, Cairo, Ill., Caruthersville, Mo., and Helena, Ark. James Sheddon & Co., 208 W. Washington St., Chicago, Ill., at \$132,682, for constructing wall consisting of steel sheet pile cut-off wall with conc. cap at Cairo, Ill.; C. G. Kershaw Contracting Co., 516 Martin Bldg., Birmingham, Ala., at \$154,024, for constructing conc. wall at Helena, Ark.; Volz Construction Co., 106 Baltimore Bldg., Memphis, Tenn., at \$86,213, for conc. wall at Caruthersville, Mo. 5-12

Va., Richmond—Contract has been let for flood-lighting of carillon in Byrd Park; Bolling H. Handy, Chmn. of Comsn.; Carneal, Johnson and Wright, Archts., Electric Bldg.; Doyle S. Russell, Contr. 9-3

Va., Richmond—Cruickshanks Iron Works Co., Dinien and S. A. L. R. Richmond, has contract for 300 tons struc. steel for transit sheds and warehouse for City; Hankins & Johann, 2904 Moore St., for aluminum work including sides; City Building Corp., Bldrs. Exchange Bldg., Gen. Contr. 5-26

Miscellaneous Enterprise

Ala., Birmingham—Holland Highway Express, Inc., 132 Fifth Ave., S., Nashville, Tenn., acquired Central Truck Depot; will use as base for operations in Alabama for shipments to all points near and south of Birmingham.

Ala., Goodwater—Thomas S. Bugg, Dadeville, acquired Coosa County Enterprise.

D. C., Washington—Lee T. Turner, 1366 Perry Place, has contract at \$18,369, for shop alterations, U St. between 16 and 17 Sts., N. W., for District Commr.

D. C., Washington—Charles H. Tompkins, 1608 K St., N. W., erect 2 story, brick and conc. bottling plant 1923 New York Ave., N. W.; cost \$15,000.

D. C., Washington—W. L. Bell, 1524 Allison St., has contract for repairing fire damage to bakery 1849 Seventh St., N. W., for M. Holtherlien; Julius Wenig, Edmonds Bldg., Archt.

Fla., Jacksonville—Points, Inc., chartered; H. Kelso, 574 Ernest St.; publishing.

Fla., Orlando—Florida Farmer, Julian Langner, Editor, 1451 W. Forsyth St., Jacksonville, will move and publish paper in Orlando.

Fla., Palatka—Program Advertisers, Inc., chartered; J. C. Calhoun, F. J. Fearnside.

Ky., Balls Landing—John H. Perry, Pres., American Press Assn., 225 W. 39th St., New York, and Pensacola, Fla., reported, acquired 2800 acres in Owen County; develop stock farm.

Ky., Lexington—Central Kentucky Film Service, incorporated; Charles H. Behlen, 154 Preston Ave.

Ky., Louisville—E. E. Olsen Construction Co., capital \$50,000, incorporated; E. E. Olsen, L. H. Nelson.

La., New Orleans—Gulf Steamship Line, Inc., formed with James A. Wilson, Pres., 1603 American Bank Bldg.; operate ships between New Orleans and Texas ports; purchased steamship Western Wave from North American Fruit & Steamship Co.; will operate weekly freight and passenger service between New Orleans and Houston, Tex.

La., Shreveport—Allen Monument Co., capital \$20,000, incorporated; Wm. P. Allen, Bernard L. Allen.

Md., Baltimore—A. Goodman, 2000 Whit-tier St., has contract for plant addition for Fish Dry Cleaning Co., 2553 Pennsylvania Ave.; W. S. Austin, Engr., Maryland Trust Bldg. 5-19

Md., Baltimore—Lagna & Rossi, Inc., 4814 Pleasant View Ave., incorporated; Frank Lagna, John Rossi; decorating.

Md., Baltimore—Green Spring Dairy, Inc., 5413 Harford Ave., incorporated; J. Kemp Bartlett, Jr., U. S. Fidelity & Guaranty Bldg., and Robt. D. Bartlett.

Miss., Natchez—Natchez-Eola Hotels Co., incorporated; H. A. Cleaver, New Orleans, La.; J. B. Miller, Natchez.

Mo., DeSoto—Donald Construction Co., incorporated; N. F. Donald.

Mo., Independence—Cedar Crest Farms, incorporated; Robert W. Barr, Independence; Edward Watson, 614 New Jersey Ave.; creamery.

Mo., Jefferson City—City install traffic lights downtown business district.

Mo., Kansas City—W. & M. Sanitary Receptacle Corp. incorporated; Ed. Kempinger, 1172 Warnall St.

Mo., Kansas City—A. W. Carlson Estate, C. A. Carlson, Pres., 514 S. Cedar St., erecting addition to building 1120 Holmes St. for Standard Laundry & Linen Supply Co., Lessee; double present capacity; 75x130 ft.; 2 story and basement; fireproof; foundation for additional stories.

Mo., Kansas City—Dad's Original Scotch Oatmeal Cookie Co., Inc., chartered; Christian D. Fleck, Claire Dale.

Mo., Rich Hill—Rich Hill Dehydrating Co., Inc., chartered; Archie K. Purdy, Leon W. Matthews.

Mo., Sedalia—W. J. Menefee Construction Co., capital \$50,000, incorporated; W. J. Menefee, Eldred Menefee.

Mo., St. Louis—Love Ice Cream Co., 423 DeBaliere, chartered; Edward McGahan, 1913 Linton St.

Mo., St. Louis—W. K. Woods Stationery Co., capital \$50,000, incorporated; Wm. H. Haggerty, 4594 Maffitt St.

Mo., St. Louis—Henry Bender, Inc., chartered; H. M. Stolar, 408 Pine St.; manufacture draperies.

Mo., St. Louis—Novelty Ice Cream Products Co., incorporated; Killian Scheller, 740 Eastgate.

Mo., St. Louis—Prosperian Press, Inc., incorporated; Wm. R. Fuller, 8016 Benton St.

Mo., St. Louis—Kennedy's Field Devices, Inc., chartered; C. B. Kennedy, 411 N. 7th St.

Mo., St. Louis—Electric Clock Advertising Co., incorporated; B. H. Cohn, 6308 Kings-bury.

Mo., St. Louis—Standard Engineering Works, incorporated; Emil Doerr, 5015 Murdoch St.

N. C., High Point—Sun-Set Dairies, Inc., capital \$50,000, incorporated; Garland B. Daniel, 103 W. Washington St.

N. C., High Point—R. K. Stewart & Son, S. Main St., High Point, reported, has contract for addition to plant of Carolina Container Co. 6-2

N. C., Lexington—Carolina Theatre Co., capital \$50,000, incorporated; T. Link, J. T. Hedrick, Jr.

N. C., Pinehurst—Hawes & Eckert, Inc., capital \$10,000, incorporated; George P. Hawes, Jr., Robt. Eckert, engineering.

Tenn., Knoxville—Knoxville Publishing Co., organized by Nat. Blaine Taylor, acquired Knoxville Journal from East Tennessee Printing & Publishing Co. 1-28

Tenn., Lexington—L. M. Joynes, Jackson, has contract to erect shirt factory to be occupied by Salant & Salant, Inc., 476 Knickerbocker Ave., Brooklyn, N. Y.; 240x123 ft.; 1 story; brick; conc. floor; cost \$21,000; F. F. Parish, Archt., Jackson. 5-5

Tenn., Sweetwater—A. Summers, Goodwater, Ala., acquired weekly at Sweetwater.

Tex., Beaumont—San Jacinto Life Insurance Co., R. B. Cousins, Jr., Pres., Beaumont, merged with Great Southern Life Insurance Co., 401 Louisiana Ave., Houston, E. P. Greenwood, Pres.; headquarters to be in Houston.

Tex., Blooming Grove—W. A. Crawford acquired Blooming Grove Times.

Tex., Houston—Automatic Cabinets, Inc., capital \$200,000, incorporated; Wm. Anderson, 1508 W. Main St.

Tex., Houston—Shudde's Southern Hat Co., Inc., capital \$50,000, incorporated; A. J. Shudde, 4510 Woodside St.

Tex., McKinney—O. H. Anderson plans erecting \$27,500 creamery plant to include complete butter manufacturing plant and ice cream mix plant.

Tex., Texhoma—Riffe Bros., Inc., capital \$150,000, incorporated; G. D. Riffe, W. A. Cannon, grain elevator.

Va., Hopewell—Atmospheric Nitrogen Corp. will repair burned portion of plant.

Va., Norfolk—W. C. Rawls & Co., Inc., capital \$40,000, incorporated; W. C. Rawls, Bankers Trust Bldg.; radios.

Va., Norfolk—Wergley's, Inc., capital \$15,000, incorporated; J. Oscar Wergley; bakery.

Va., Richmond—Moon-Lite Gardens, Inc., chartered; Harry F. Blackwell.

Va., Tazewell—Imperial Ice Cream Co., Parkersburg, W. Va., acquired control of North Tazewell plant of Tazewell County Co-operative Milk Producers Assn.; installing machinery.

W. Va., Charleston—Carbide & Carbon Chemical Corp., Carbide & Chemical Bldg., New York, reported, applied to U. S. Engrs. Office, Huntington, for permission to construct gasoline loading plant on channel side of Blaine Island in Kanawha River; work includes float 10 ft. wide, 42 ft. long; for loading gasoline, mooring cabin, etc.

Motor Bus Lines and Terminals

Ga., Augusta—Greyhound Lines, 1157 S. Wabash Ave., Chicago, Ill., plan erecting bus terminal.

La., Shreveport—Bells Cab, Room 808, City Bank Bldg., incorporated; Samuel Taylor, Mark L. Rankins, both New Orleans.

Md., Baltimore—Chesapeake Taxi Service, Inc., 214 N. Pearl St., incorporated; Harry Walters, Pauline Liberto.

Md., Baltimore—Capitol Taxicab Service, Inc., 3 E. Lafayette Ave., incorporated; Bradley T. J. Mettee, Jos. L. Silver.

N. C., Asheville—Asheville-New York Freight Lines, Inc., chartered; Charles J. Kirk, H. Edward Wells.

N. C., Charlotte—Queen City Lines of Charlotte, capital \$200,000, incorporated; J. L. Gilmer, 955 S. Marshall St., Winston-Salem; L. A. Love, Concord; H. H. Hardison, Wadesboro.

Tex., Houston—Dixie Shippers, Inc., chartered; Sanford B. Southwick, 715 Richmond St.

Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Proposed Construction

ARKANSAS—State Highway Comsn., Little Rock, to have \$2,161,830 of Federal aid funds available July 1; probably complete unfinished projects, pay outstanding obligations to contractors, institute new projects.

D. C., Washington—Commissioners, 509 District Bldg., open bids June 17 for resurfacing about 32,000 sq. yd. asphaltic, conc. or granite block streets and avenues by replacement method.

Ky., Richmond—Madison County Fiscal Court to resurface nine roads; \$15,300.

LOUISIANA—Louisiana Highway Comsn., Baton Rouge, opens bids June 28 for furnishing washed and screen gravel, 40 per cent sandelay gravel, reef shell, crushed limestone, slag and sand, during month of July.

La., Barksdale Field, Shreveport—See Want Section—Bids Asked.

MARYLAND—State Roads Comsn., L. H. Stuart, Sec., Baltimore, opens bids June 21 for projects in following counties:

Baltimore—4.39 mi. conc. shoulders, Joppa Road, Harford Road at Carney to Towson, B-184-411; 76 mi. macadam, Stungtown Rd., Cont. B-21-3 to Yeoh Rd., B-252-42; **Washington**—3.83 mi. conc. shoulders, Middleburg Pike, Hagerstown to Pennsylvania state line, W-110-61, FAP 258.

MARYLAND—State Roads Comsn., L. H. Stuart, Sec., Baltimore, received low bids for projects in following counties:

Baltimore City—79 mi. sheet asphalt, Loch Raven Blvd., Argonne Drive to Arlington Ave., and from Woodbourne Ave. to Belvedere Ave., BC-118-71, Baltimore Asphalt Block & Tile Co., Baltimore, \$29,270; **Caroline**—1 mi. conc., Denton-Tuckahoe Bridge Rd., end of Contract Co-65 toward Tuckahoe bridge, Co-76-22, Phillips Bros., Salisbury, \$10,581;

Prince George's—2.99 hi. gravel, Silesia to Fort Washington, P-221-811, L. R. Colbert, Fredericksburg, Va., \$17,869;

Queen Anne's—1.40 mi. macadam resurface, Chester Corner toward Dominion, Q-77-32, T. Edgie Russell, Frederick, \$19,426;

Worcester—1.14 mi. conc., Dividing Creek toward Snow Hill, Wo-119-14, Phillips Bros., Salisbury, \$14,973.

Md., Baltimore—City, George Cobb, Highways Engr., has low bid of \$18,725 from Harry T. Campbell & Sons Co., Towson, for Cont. 620, 12,000 sq. yd. conc., Prettyboy Dam, of \$18,994, from Mahoney Bros., 1111 Rutland St., for Cont. 617, 12,000 sq. yd. conc. 5-26

Md., Baltimore—City, George Cobb, Highways Engr., opens bids June 22 for grading, curbing and paving on streets listed in Cont. 624, 6000 sq. yd. vitrified brick, and in Cont. 625, 3500 sq. yd. granite block.

MISSISSIPPI—State Highway Comsn., E. D. Kenna, Director, Jackson, opens bids June 21 for following for period, July 26, 1932 to January 25, 1933: Hauling gravel and clay; furnishing gravel and sand, gasoline and kerosene, motor oils, lubricating greases, creosoted lumber, creosoted piling, ZMA lum-

ber, Wolmanized lumber, tires and tubes, paints, road signs and markers, sign posts, road oils, asphalt and tars.

MISSOURI—State Highway Comsn., Jefferson City, received low bids for projects in following counties, bids opened June 7:

Adair—3.974 miles gravel, route SW Kirksville-East; L. W. Spengler Const. Co., Sturgeon, Mo., \$11,069;

Barton—4.733 mi. chats, Route 160-North, R. Newton McDowell, Inc., Midland Bldg., Kansas City, Mo., \$6,418;

Benton—7.554 mi. graded earth from Lincoln to Henry County line, State Highway Dept., Jefferson City, \$18,948;

Bates—16.961 mi. crushed stone or chats, Audrain County line to Henry County line, O. O. Fuller, Nevada, Mo., \$57,925; alternate bid by W. D. Knoll, Clinton, Mo., \$45,505;

Butler—9.76 mi. gravel, Route 67, Wayne County line to Poplar Bluff, H. H. Ruddell, 759 Stanford St., Springfield, Mo., \$64,501;

Caldwell—4.1759 mi. crushed stone, Cowgill to Braymer on Route SN, Fred Allen, McCreedie, Mo., \$11,365;

Camden—3.933 mi. gravel, Route 54AA, Macks Creek to Preston, H. H. Ruddell, 4006; 399-ft. bridge over Little Niangua River, Ozark Engineering Co., Joplin, Mo., \$22,332; 524-ft. bridge between Barnumton and Macks Creek, over Little Niangua, Clinton Bridge Works, Clinton, Iowa, \$132,980;

Carroll—6.22 mi. gravel, Carrollton-west, R. G. Aldridge, Kansas City, Kans., \$6,415;

Chariton—6.264 mi. crushed stone, Route SB, Salisbury-north, P. J. Murphy, Moberly, Mo., \$11,052;

Clay—3.882 mi. graded earth, Route 69 to Missouri City, Ackley Const. Co., Kansas City, Mo., \$26,606;

Crawford—4.814 mi. gravel, Leasburg-southeast, State Highway Dept., \$11,294; 7.103 mi. gravel, Route 10, Cherryville to Davisville, R. E. Martin, Nashville, Tenn., \$43,699;

Cole—9.274 mi. gravel, Jefferson City to Mertens, State Highway Dept., \$37,064;

Dallas—1.976 mi. crushed rock and gravel, on Olive Spur, Route 65, Amyx and Mitchell, Bakersfield, Mo., \$47,28;

Dunklin—8.7 mi. road oiling, Route 25, Rock Hill Asphalt and Construction Co., 1210 N. Rock Hill Rd., St. Louis, \$5343; 322 mi. 20-ft. concrete, Kennett-eastward, S. J. Cohen & Co., Blytheville, Ark., \$16,720;

Franklin—9.076 mi. gravel, Route 30, State Highway Dept., \$17,673;

Gentry—4.071 mi. graded earth, Route ST, to McFall, R. G. Aldridge, Kansas City, Kans., \$10,286;

Greene—2.215 mi. rock-asphalt, Republic-west on Route 38, Garrett Const. Co., 2114 E. Commercial St., Springfield, \$14,489; 2.973 mi. crushed rock and gravel, Springfield to Turner, H. H. Ruddell, \$25,251;

Howard—1.542 mi. 20-ft. concrete, New Franklin north and south, Harrison Engineering and Const. Corp., Fairfax Bldg., Kansas City, Mo., \$22,279; 7.4 mi. gravel haul, C. K. Kost, Joplin, Mo., \$869;

Iron—5.287 mi. gravel, Route 21, Glover to Reynolds County line, R. E. Martin, Nashville, Tenn., \$60,654; 5.53 mi. gravel, Viburnum to Route 32, L. Gray, 1223 Waldron St., St. Louis, \$10,123;

Jasper—Four bridges on Route 57 over North Fork, North Fork overflow, Spring River and Elm Branch, Maxwell Const. Co., Columbus, Kans., \$56,994;

Jefferson—4.469 mi. gravel, Zion to Hillsboro, Jefferson County, Hillsboro, Mo., low bidder at \$6640;

Johnson—6.44 mi. crushed stone, Pittsville to Holden, Massmann Const. Co., N. Y. Life Bldg., Kansas City, Mo., \$18,689;

Laclede—646-ft. bridge over Gasconade River, between Lebanon and Nebo, George W. Condon Co., Omaha, Neb., \$24,388;

Lafayette—5.73 mi. crushed stone, Route 40 through Odessa, Nevada Const. Co., Nevada, Mo., \$272;

Linn—2.623 mi. 20-ft. plant-mixed retreat, Linneus, north and south, Rock Hill Asphalt and Const. Co., \$15,263; 2.052 mi. plant-mixed retreat on Bucklin Spur, Rock Hill Asphalt and Const. Co., \$12,699;

Livingston—5.51mi. 20-ft. plant-mixed retreat, on New Cambria Spur, Rock Hill Asphalt and Const. Co., \$4377; 900 mi. 18-ft. asphalt and concrete, Route 63, Macon-east, Harry Tidd, Hutchinson, Kans., \$18,792; alternate bid, Asphalt Paving Co., 1328 Sublette St., St. Louis, \$17,000;

Miller—7.232 mi. gravel, Route 17, Tusculumbia to Iberia, M. E. Gillioz, Monett, Mo., \$58,316;

Marion—13.401 mi. gravel, Shelbyville to Palmyra, Route 56, Joseph Kest and Sons, Edwardsville, Ill., \$60,856; 536-ft. bridge, between Shelbyville and Palmyra, Vincennes Bridge Co., Vincennes, Ind., \$32,547; 1.879 mi. 20-ft. conc., SY-1, Jos. Kest & Sons, \$32,256;

McDonald—2.895 mi. crushed stone and gravel, Route SA to Route 90, J. M. Roark, Anderson, Mo., \$22,613;

New Madrid—7.122 mi. gravel, Morehouse-south, E. L. Markham, Cape Girardeau, Mo., \$26,482;

Perry—11.683 mi. gravel, Route 51, Perryville-south, Kiefner and Geile Const. Co., Perryville, Mo., \$50,877; 5.138 mi. gravel, Perryville to Vichele, Kiefner and Geile Const. Co., \$10,552;

Pulaski—8.825 mi. crushed rock and gravel, Richland to Crocker, Amyx and Mitchell, Bakersfield, Co., \$17,808;

Ralls—6.587 mi. gravel, Center-north, F. T. O'Dell, Hannibal, Mo., \$21,938;

Ray—10.108 mi. crushed stone, Hardin to Braymer, Joseph L. Pohl, Nevada, Mo., alternate bid No. 1, \$51,773; alternate bid, \$51,881;

Scott—2.470 mi. 20-ft. asphalt-concrete or rock asphalt, Route 61 to Illmo, E. L. Markham, Cape Girardeau, \$15,783; alternate bid, Asphalt Paving Co., \$30,192;

Stoddard—4.506 mi. gravel, Leora to Aquilla, and four small bridges, Kiefner and Geile Const. Co., \$20,672;

Sullivan—0.649 mi. gravel, Milan-east, on Route 6, George W. Conlon Co., Omaha, Neb., \$24,737;

Warren—5.61 mi. gravel, Route 40 to New Truxton F. T., O'Dell, Hannibal, Mo., \$15,016;

Washington—6.701 mi. gravel, Franklin County line to Route 21, State Highway Dept., Jefferson City, Mo., \$14,532;

Wayne—0.406 mi. graded earth, Williams-ville to Route 67, Cherus Const. Co., Minneapolis, Minn., \$16,041.

MISSOURI—State Highway Comsn., Jefferson City, preparing plans for resurfacing 16 mi. Malang highway, Sarcoxe to Monett.

Mo., Clayton, St. Louis—St. Louis County, Roy Jablonsky, Highway Engr., opens bids June 22 for improving Adams Ave., Geyer to Ballas Road.

Mo., Kansas City—City plans repaving Woodland Blvd., Strong Ave. to south city limits.

Mo., Kansas City—City, C. E. Peterson, City Engr., proposes widening three curves on Central Ave., between Fifth and Tenth Sts.

Mo., St. Louis—Bd. of Public Service opens bids June 28 for reconstructing Vandeventer Ave., Chouteau to Hunt Ave.; and Market St. between 11th and 15th Sts.

Mo., St. Joseph—Board of Public Works, W. E. Sullivan, Pres., plans following: Grading north sidewalk space of Jackson St., 24th St. east; paving with Portland cement conc. alley between Mitchell Ave. and Renick St.; alley between Howard and Colburn Sts.; alley between Massachusetts and Michigan Sts.

N. C., Asheville—Buncombe County Comrs., considering grading and sand graveling 1 mi. road through Clark's Chapel community; A. L. McLean, Commr. of Highways.

N. C., Durham—City, C. B. Alston, City Clerk, construct sidewalks on Mangum St.

OKLAHOMA—State Highway Comsn., Sam R. Hawks, Chmn., Oklahoma City, opens bids June 21 for projects in following counties:

Carter—7.619 mi. grading and drainage structures, Hwy. 22, through Tatum, SAP 529-Sec. A, roadway, 107,880 cu. yd. A excav., 5462 cu. yd. B excav., 7634 cu. yd. C excav., 670 cu. yd. A conc., 53,040 lb. rein. steel, 512 lin. ft. 18-in., 520 lin. ft. 24-in., and 44 lin. ft. 30-in. R. C. pipe; Sec. B, bridges, 2000 cu. yd. A excav., 345.3 cu. yd. A conc., 151.2 cu. yd. AA conc., 53,360 lb. rein. steel, 480 lin. ft. R. C. hand rail, 103,200 lb. struc. steel, 2430 lin. ft. treated timber piling, 8.2 M f.b.m. creos. struc. timber, removal 2 bridges;

Creek—3.349 mi. grading and drainage structures, Hwy. 48, Pawnee-Creek County line south—Roadway, 34,600 cu. yd. A excav., 2225 cu. yd. B excav., 16,764 cu. yd. C excav., 130.5 cu. yd. A conc., 9850 lb. rein. steel, 236 lin. ft. 18-in., 220 lin. ft. 24-in., 108 lin. ft. 30-in. R. C. pipe, 2 section markers; Bridges, 224.9 cu. yd. A conc., 32 cu. yd. A conc. (pier bases), 91.8 cu. yd. AA conc., 30,020 lb. rein. steel, 153 lin. ft. R. C. hand rail, 111,500 lb. struc. steel;

Harper—6.620 mi. grading and drainage structures, Hwy. 35, May west, SAP 792 E-Sec. E, roadway, 125,714 cu. yd. A excav., 5094 cu. yd. B excav., 1907 cu. yd. C excav., 129 treated timber ditch cheeks, 316.72 cu. yd. A conc., 27,194 lb. rein. steel, 68 lin. ft. 19-in. and 192 lin. ft. 24-in. R. C. pipe; Sec. E, bridges, 213.8 cu. yd. A conc., 321.3 cu. yd. AA conc., 64,920 lb. rein. steel, 1020 lin. ft. R. C. hand rail, 218,400 lb. struc. steel, 4760 lin. ft. creos. timber piles, 8.4 M f.b.m. creos. struc. removal one bridge;

Pawnee—2.708 mi. grading and drainage structures, Hwy. 48, north of Hallett, FAP

108—Roadway, 38,224 cu. yd. excav., 5332 cu. yd. B excav., 35,479 cu. yd. C excav., 336.9 cu. yd. A conc., 27,110 lb. rein. steel, 156 lin. ft. 18-in., 84 lin. ft. 24-in., 92 lin. ft. 30-in. R. C. pipe, 250 sq. yd. laid up rip rap, 2 section markers; Bridges, 300 cu. yd. A excav., 500.6 cu. yd. A conc., 78.4 cu. yd. AA conc., 35,900 lb. rein. steel, 163 lin. ft. R. C. hand rail, 56,800 lb. struc. steel, removal two bridges.

Okla., Oklahoma City—City, L. M. Bush, Engr., plans paving S. 28th St.; probably pave Villa Ave. along east side of Stonewall Jackson junior high school.

Okla., Oklahoma City—Oklahoma County Comms. make repairs to rain-damaged roads.

TEXAS—State Highway Comsn., Austin, making plans for work in following county: Dallas—widening 11 mi. Hwy. 1, Dallas to Garland; \$200,000.

TEXAS—State Highway Comsn., Gibb Gilchrist, Engr., Austin, to resume preparations for construction of Bankhead highway cut-off to point three mi. south of Strawn, Hwy. 89.

Tex., Beaumont—City, Paul Millard, to open Arcle and Blanchette streets.

Tex., Galveston—Galveston County, I. Predecki, Auditor, opens bids June 21 for 21 mi. bituminous surface treatment on shell roads: League City—Kemah Road and street through League City; La Marque—Hitchcock Road and street through Le Marque; San Leon—Ames Store to Schoolhouse Road; Alleshouse Road; roads and ramp on Galveston Island.

VIRGINIA—Department of Highways, C. S. Mullen, Ch. Engr., Richmond, opens bids June 28 for projects in following counties: Dinwiddie—6 mi. soil, Route 10, at Ritchies Store, F366C2, 1 acre clear and grub, 3457 cu. yd. excav., 178 lin. ft. pipe, 6 cu. yd. B conc., 2203 cu. yd. soil; Scott and Washington—22 mi. local gravel, Route 10, west of Bristol to east of Moccasin Gap, F412&528ADC, 10,000 cu. yd. excav., 72,600 cu. yd. gravel;

Washington—6.3 mi. local gravel, Route 110, north of Route 10 intersection to south of Holston River, F518AB1&D, 5 acres clear and grub, 118,707 cu. yd. excav., 3238 lin. ft. pipe, 482 cu. yd. conc., 553 cu. yd. B conc., 34,836 lb. rein. steel, 20,815 cu. yd. gravel, including bridge over Greendale Creek, involving 33.8 cu. yd. A conc., 22 cu. yd. B conc., 3615 lb. rein. steel;

Roanoke—4 mi. macadam, Route 10, between Roanoke and Salem, F562A, 30,023 cu. yd. excav., 958 lin. ft. pipe, 99 cu. yd. A conc., 234 cu. yd. B conc., 10,291 lb. rein. steel, 65,934 sq. yd. macadam;

Augusta—2.7 mi. macadam, Route 33, Staunton north, F600GH, 1 acre clear and grub, 20,000 cu. yd. excav., 404 lin. ft. pipe, 74 cu. yd. A conc., 22 cu. yd. B conc., 4469 lb. rein. steel, 32,566 sq. yd. macadam;

Warwick—5 mi. conc., Route 39, north of Newport News, S668E, 1406 cu. yd. excav., 96 lin. ft. pipe, 2 cu. yd. B conc., 4489 sq. yd. conc., 12 mi. grade and drain, Route 529, Newport News to Rich Neck Road, S699A, 83 acres clear and grub, 272,370 cu. yd. excav., 3378 lin. ft. pipe, 550 cu. yd. A conc., 114 cu. yd. B conc., 39,940 lb. rein. steel;

Frederick—8.7 mi. macadam, Route 33, Winchester to north of Middletown, F675E, 5 acres clear and grub, 64,174 cu. yd. excav., 2028 lin. ft. pipe, 91 cu. yd. A conc., 137 cu. yd. B conc., 7575 lb. rein. steel, 143,967 sq. yd. macadam;

Westmoreland—3.4 mi. gravel, Route 611, Potomac Beach to east of Perkins Corner, S707, 2 acres clear and grub, 20,665 cu. yd. excav., 688 lin. ft. pipe, 17 cu. yd. A conc., 102 cu. yd. B conc., 1952 lb. rein. steel, 11,132 cu. yd. gravel;

Pittsylvania—1.3 mi. soil, Route 57, east of Chatham, S735F, 4 acres clear and grub, 12,663 cu. yd. excav., 312 lin. ft. pipe, 36 cu. yd. A conc., 84 cu. yd. B conc., 3853 lb. rein. steel, 4190 cu. yd. soil.

WEST VIRGINIA—State Road Comsn., Geo. E. White, Sec., Charleston, with own forces to pave project in following counties:

Berkeley and Jefferson—widening, resurfacing and laying conc. shoulders on Charles Town-Martinsburg Hwy.

Va., Clarendon—Arlington County Board, Roy S. Braden, County Mgr., open bids June 13 for resurfacing roads.

Contracts Awarded

FLORIDA—State Road Department, H. J. Wells, Chmn., Tallahassee, let contracts for projects in following counties:

Hillsborough—2.35 mi. Road 5, Proj. 76-C, W. L. Cobb Construction Co., ft. of Nebraska St., Tampa, \$76,028; bridges over A. C. L. tracks and Six Mile Creek, 76-D, Lettrell Construction Co., New Orleans, La., \$47,027;

Levy—10.40 mi. reconstruction Road 13, Ocala lime rock base and surface treatment,

677-C, L. B. McLeod Construction Co., Wiliston, Fla., \$161,666; also for Proj. 956, Eppinger & Russell, Talleyrand Ave., Jacksonville, \$773.

Palm Beach—Three conc. bridges, Road 25, Dudley-Murphy Construction Co., West Palm Beach, \$9,140.

Md., Baltimore—City, George Cobb, Highways Engr., let contract for crushed stone, Dists. 1 and 5 at \$4,114 to Woodberry Trap Rock Quarry, 903 W. 36th St.; for Dists. 2, 3 and 4, at \$15,468, T. B. Gatch & Sons, 5937 Belair Rd.

MISSISSIPPI—State Highway Comsn., Jackson, with own forces to asphalt 18 mi. gravelled roadway, between Bay St. Louis and Louisiana line.

Miss., Vicksburg—City, Alderman Julius M. Buchanan, Chmn., Street Dept., let contract to Frank M. Garvey Construction Co. for resurfacing portions of Cherry and Walnut streets; S. S. Patterson, City Clerk. 5-26

NORTH CAROLINA—State Highway Comsn., Raleigh, let contracts for projects in following counties:

Wake and Chatham—Oil treatment on Route 90, between Apex and Pittsboro, Kiker and Young, Reidsville, \$33,825;

Robeson—Approaches to bridges on county road, between Marietta and Fair Bluff, F. J. McGuire, Washington, N. C., \$12,083.

OKLAHOMA—State Highway Comsn., Oklahoma, let contracts for projects in following counties:

Beckham—Two bridges, Hwy. 34, south of Carter, S-816-A, Boardman Co., 11th and Hawk Sts., Oklahoma City, \$74,194;

Custer—Underpass on U. S. 66, in Weatherford, S-204-K, consisting of 2321.2 ft. grading, drainage structures and paving, Park & Co., Oklahoma City, \$19,154;

Major—7.693 mi. grading and drainage structures, Hwy. 58, through Ringwood toward Fairview, S-404-I, G. E. Keck, Fairview, \$20,250.

TEXAS—State Highway Dept., Gibb Gilchrist, Engr., Austin, let contracts totaling \$1,121,000 for projects in following counties, letting June 10:

Beil and McLennan—13.3 mi. Hwy. No. 2, grading and small drainage structures, near Temple, to Falls County line and from Eddy 3.8 mi. northeast, Brown & Root, Austin, \$50,088;

Brewster—3.3 mi. Hwy. No. 3, grading and drainage structures, from Alpine to Presidio County line, W. W. Vann & Co., Mercedes, \$53,069;

Calhoun—10.82 mi., Hwy. No. 57, grading and small drainage structures from Green Lake north to connection with Hwy. No. 29 near Port Lavaca; John H. Pate, McAllen, \$25,006; Hwy. No. 57, bridges over Big and Little Chocolate Creeks between Port Lavaca and Green Lake; W. A. McClelland, 4617 Walker St., Houston, \$13,320;

Cherokee—7.8 mi. Hwy. No. 43, triple asphalt surface treatment and iron ore topsoil shoulders, from Jacksonville east; Public Construction Co., Denton, \$29,940;

Coke—Hwy. No. 70, ten multiple box culverts between Bronte and Tom Green County line, Dozier Construction Co., Austin, \$39,679;

Comal—10.87 mi. Hwy. No. 2, grading and drainage structures, New Braunfels to Guadalupe County line, J. P. Foty, Burt Bldg., Dallas, \$53,851;

Concho and Menard—9.4 mi. Hwy. No. 4, grading and drainage structures, from Eden to Menard County line, E. F. Bucy & Sons and C. T. Childs, Rising Star, \$28,083; Hwy. No. 4, bridges over Harden and Brady Creeks between Eden and Menard, Dozier Construction Co., Austin, \$28,270;

Crockett—9.13 mi. Hwy. No. 27, grading and small drainage structures from Ozona line mi. east, J. S. Wade & Son, Coleman, \$34,841; Hwy. No. 27, multiple box culverts from Ozona nine miles west, Dozier Construction Co., Austin, \$22,202;

Goliad—16.92 mi. Hwy. No. 119, caliche base courses, from Goliad to DeWitt County line, Cocke & Braden, Marshall, \$30,869;

Hemphill—Hwy. No. 4, bridge over Washita River and three multiple concrete box culverts between Canadian and Gageby, Ragsdale Pace, 3410 Meadowbrook St., Fort Worth, \$21,144; 13.69 mi. Hwy. No. 4, grading and small drainage structures, from intersection with Hwy. No. 33 south to Wheeler County line, Warren Lott, Amarillo, \$33,070;

Kerr—4.79 mi. Hwy. No. 41, double bituminous surface treatment and 10.68 mi. crusher-run caliche base course, from Mountain Home east, Brown & Root, Austin, \$22,406;

Lubbock—6.86 mi. Hwy. No. 24, grading and drainage structures, from Idalou to Crosby County line, Huddleston & Work, Crosbyton, \$16,469;

McLennan—14.48 mi. Hwy. No. 21, concrete pavement, from two miles north of Bruce-

ville to Waco, F. P. McElwrath Construction Co., Corsicana, \$217,424;

Navarro—Hwy. No. 31, concrete pavement, from Corsicana to two miles east of Powell, F. P. McElwrath Construction Co., \$138,793;

Pecos—12 mi. Hwy. No. 27, grading and small drainage structures, from 27 mi. east of Fort Stockton, W. W. Van & Co., Mercedes, \$44,952; 13 mi. Hwy. No. 27, grading and small drainage structures, 13 mi., starting 14 mi. east of Fort Stockton, Brown & Root, \$45,019;

Reeves and Culberson—13.89 mi. Hwy. No. 17, grading and small drainage structures, from Orla to New Mexico line, C. E. Armstrong & Son, Pecos, \$32,784.

Va., Fredericksburg—Fredericksburg and Spotsylvania County Battle Fields Memorial Comsn., Maj. Arthur E. Willbourn, Sec., 1011 Princess Anne St., let contract at \$11,932 to Baskerville and Haskins, McKenney, Va., for 4.6 mi. 30-ft. roadway; 22.88 acres clearing, 26,731.24 cu. yd. excav., 327.8 cu. yd. conc., 21,116 lb. struc. steel. 5-12

W. Va., Huntington—Huntley Construction Co., Ashland, Ky., received \$35,000 contract for surfacing roads around U. S. Veterans Hospital.

Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

D. C., Washington—Dist. Comms., let following contracts for sewers: W. F. Brenizer Co., 1501 S. Capitol St., for Takoma Park storm water sewer, Aspen St. and Sandy Spring Rd.; Ligon & Ligon, 3310 Ridgewood Ave., Baltimore, Md., for Bower Rd. sanitary sewer; Peter D'Adamo, Old Town Natl. Bank Bldg., for 46 St. storm water, New Hampshire Ave. combined sewer.

D. C., Washington—See Want Section—Bids Asked.

Md., Baltimore—City, Dept. Public Works, Bureau of Sewers, receives bids June 22 for sewers, Storm Water Contr., No. 177.

Tenn., Nashville—Bd. of Public Works authorized sewers in Garden Ave. and south side Harding Rd.

Tex., Beaumont—City has low bid of \$3416 from Pyramid Concrete Products Co. for 2300 ft. pipe for sewer lines; of 54½ cents per ft. on 6-in. and 76½ cents on 8-in. cast iron pipe for water dept. from McVane Cast Iron Pipe Co., 1201 Vanderbilt Rd., Birmingham, Ala.; of \$676 for nine fire hydrants from E. L. Wilson Hardware Co.

Tex., Dallas—W. G. Cullum, has contract for sewer Turtle Creek from Wycliff Ave. to Armstrong Ave. to connect with Dallas sewer, to serve Highland Park and University Park.

Tex., Tyler—See Want Section—Bids Asked.

Street Railways

Tex., Dallas—Louis Mentz, reported, acquired interurban lines of Dallas-Terrell and Denton Interurban.

Telephones and Radio

Alabama—Alabama Public Service Comsn., Montgomery, postponed, without date, hearing of Alabama Public Utilities Co., Arnold Duncan, Pres., 105 W. Adams St., Chicago, Ill., authorizing and approving purchase of telephone properties of South-States Utilities Co., Inc., in Haleyville, Winfield, Vernon, Carrollton, Aliceville, etc. 5-19

Tex., Beaumont—Sabine Broadcasting Co. incorporated; J. M. Gilliam, E. B. Dye.

W. Va., Augusta—Independent Telephone Co., incorporated; J. P. Everett, Rommey; J. F. Smith, Augusta.

Textile Mills

N. C., Spindale—Kennedy-Van Saun Mfg. & Engineering Co., 2 Park Ave., New York City, has contract for installing equipment for firing boilers at plant of Elmore Corp.

N. C., Roseboro—Robert Yarn Mfg. Co., capital \$200,000, incorporated; R. A. McGilniss, Salisbury; B. H. Hamilton, Roseboro.

Tex., New Braunfels—Chamber of Commerce and committee of Texas Angora Goat Raisers' Assn., Rocksprings, reported, completing plans for mohair mill; permit granted by Sec. of State, Austin, to sell \$50,000 in stock in proposed plant. 5-3

La., New Orleans—Lane Cotton Mills, Sigmond Odenheimer, Pres., have plans by

company's engineers for 2 story, 180x300 ft., rein. conc. and steel addition to present cotton mill on Tchoupitoulas near Valence Sts.; soon call for bids.

Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that Classification.

Fla., Tallahassee—Chicago Bridge & Iron Works, Chicago, reported, has contract for 150 tons fabricated plate for elevated water tank.

La., Kenner—East Jefferson Water Works, District No. 1, M. M. Jones, Sec.-Treas., R. R. No. 2, Jefferson Highway and Shrewsbury, New Orleans, advises election postponed to June 28 on \$500,000 bonds for completing and maintaining water works system and purchasing Jefferson Water Works Co. and other companies of this section.

Md., Baltimore—City, Dept. of Public Works, Bureau of Water Supply, receives bids June 22 for c. i. pipe.

Md., Baltimore—See Want Section—Bids Asked.

Md., Baltimore—City, Dept. Public Works, Bureau of Water Supply, receives bids June 22 for 36-in. water mains York Rd. to University Pkwy.

Okl., Oklahoma City—City, Tom G. Banks, Water Supt., let contracts to following for water main material: National Cast Iron Pipe Co. and American Cast Iron Pipe Co., both Birmingham, Ala.; Columbian Iron Works, Chattanooga, Tenn.; Central Foundry Co., Herskowitz Bldg.; Darling Valve & Mfg. Co., Hales Bldg.; Sherman Machine & Iron Works, 18 E. Main St.; Crane Co., 701 W. Main St.; Earl W. Baker, 247 S. W. 21st St., all Oklahoma City; Michigan Valve & Foundry Co., 3000 Parkinson St., Detroit, Mich.

Okl., Pawnee—United States Pipe & Foundry Co., Birmingham, Ala., reported, has contract for 375 tons c. i. pipe for water works improvements; C. S. Clark Construction Co., Oklahoma City, Gen. Contr.

S. C., Greenwood—Fiske-Carter Construction Co., Spartanburg, has contract for water works unit, will revamp old storage reservoir, struc. steel and Gunite; Weideman & Single-

ton, Engrs., Candler Bldg., Atlanta, Ga. 6-9

S. C., Orangeburg—City let contract to James R. Connelly, Florence and Varnville, for boring artesian well.

Tex., Fort Bliss—See Want Section—Bids Asked.

Woodworking Plants

Ky., Louisville—Arthur B. Ransom, Pres., Ransom Hardwood Lumber Co., 54th St., West, Nashville, Tenn., reported, plans acquiring Kentucky Wagon Mfg. Co., 3rd and K Sts.; manufacture truck bodies, trailers, etc.

La., New Orleans—Merger, reported, of Otis Mfg. Co., New Orleans, and Astoria Importing & Mfg. Co., New York; company will be known as Otis Astoria Corp.; Frank G. Otis, Pres.; plan broadening scope of business.

FIRE DAMAGE

Ark., Pea Ridge—Pea Ridge Canning factory, J. M. Putman; loss \$12,000.

Ga., Greenville—Peach packing shed of Jos. Estes.

Ky., Dayton—Buildings in Tacoma Park, amusement park; loss \$35,000.

Ky., Henderson—Tri-County loose leaf tobacco warehouse, owned by W. H. Soaper and R. R. Hughes; loss \$50,000.

La., Monroe—Dixie Feeding and Furniture Co.; loss \$25,000.

Mo., North Kansas City, Kansas City—Plant of Kansas City Vinegar & Pickle Plant, 41 and Gentry Sts., Phillip Spector, Owner.

Mo., Portageville—J. W. Tipton cotton gin; loss \$10,000.

N. C., Thomasville—North State Veneer Plant, Alvas Boyles, Mgr.; loss \$50,000.

Tenn., Chattanooga—Johnston Transfer Co., 31 W. Main St.

Tenn., Nashville—Residence of M. S. Pilcher, Jr., Haverford Road; loss \$10,000.

Va., Garden City, Roanoke—Store owned by S. Gill Huffman and G. H. Pearcey.

Va., Hopewell—Portion of plant of Atmospheric Nitrogen Corp.; loss \$25,000.

W. Va., Norfolk—Plant of White Lumber Co., 22nd and Church Sts.; loss \$60,000.

W. Va., Spencer—Residence of Capt. H. J. Simmons; loss \$35,000.

pendence St., plans erecting 2-story frame residence on Fairway Dr.; conc. foundation, brick work, hollow tile, caulking, paving, drain, flagstones, carpentry and millwork, steel sash, screens, sheet metal work, electric wiring, plastering, stucco work, dampproofing, glazing, tile work, plumbing, gas heaters, septic tanks, hardware and painting; plans from Jones, Roessle & Olschner, Archt., Maison Blanche Bldg.

Md., Baltimore—Whiteley Realty Co., M. W. Whiteley, 2333 E. Monument St., plans 9 residences, 4400-18 St. Thomas Ave.; brick, 2-story.

Mo., Kansas City—James Whitworth has permit for \$10,000 residence, 1025 W. Fifty-third St.

Mo., Kansas City—Loren S. Waite, 125 E. 69th Terrace, has permit for residence 1013 W. Seventieth St.

N. C., Charlotte—F. Brandon Smith, Jr., care Thies-Smith, Commercial National Bank Bldg., plans 2-story dwelling, oak floors, slate roof, conc. footings, brick walls; est. cost \$15,000; Louis H. Asbury, 409 Independence Bldg., Archt.

N. C., Mount Airy—John Sobotta, Pres., National Furniture Co., Olive St., let contract to Mat Hines, Mt. Airy, for dwelling; est. cost \$20,000 to \$25,000; brick veneer, English type, 2-stories and basement; Harry Barton, Archt., Jefferson Bldg., Greensboro, N. C. 5-26

Tenn., Nashville—C. E. Williams, Jr., Blackburn Ave., has permit for 2-story brick veneer house, 314 Mockingbird Rd.

Government and State

Ala., Andalusia—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids June 28 for remodeling and enlarging U. S. post office.

Ala., Maxwell Field, Montgomery—Constructing Quartermaster, M. A. McFadden, Capt., opens bids July 12 for roads, sidewalks and driveways in Officers' Area.

D. C., Washington—Following prospective estimators, for \$750,000 Administration and Laboratory building, National Institute of Health, bids open June 16: H. W. Cord Co., 1003 K St.; John W. Cowper Co., National Press Bldg.; H. R. Blagg Co., Box 1535; National Construction Co., Inc., Tower Bldg., all Washington; B. W. Construction Co., 720 N. Wabash Ave., Chicago, Ill.

Ga., Fort Benning, Columbus—Following prospective estimators, noncommissioned officers quarters and garages, bids open June 30: R. K. Stewart & Son, High Point, N. C.; M & Q Construction Co., Arcade, Nashville, Tenn.; V. L. Nicholson Co., 102 W. Clinch Ave., Knoxville, Tenn.; Jas. C. Miller, Campbells-ville, Ky.; Rogers & Leventhal, Inc., 822 E. 11th St., Chattanooga, Tenn.; George D. Auchter Co., 600 E. 4th St., Jacksonville, Fla.; York Construction Co., Odd Fellows Bldg., Raleigh, N. C.; Zion Building Industry, Zion, Ill.; Algernon Blair, First National Bank Bldg.; Samford Bros., 301 Washington Ave., both Montgomery, Ala.; Batson-Cook Co., West Point, Ga.; Williams Lumber Co., Columbus, Ga.; Smith-Pew Construction Co., Inc., 435 Irwin St., Atlanta, Ga.; Murphey Pound, Columbus, Ga.

Ga., Tifton—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids June 23 for remodeling and enlarging U. S. post office.

Miss., Greenville—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids June 22 for building new mezzanine floor, U. S. post office.

Mo., Jefferson City—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, has low bid from American Elevator Machinery Co., 500 E. Main St., Louisville, Ky., at \$13,740 for elevator plant for U. S. post office building.

N. C., Mt. Airy—Following prospective estimators, U. S. post office, bids open June 24: Goode Construction Co., 11 E. 5th St., Charlotte, N. C.; Industrial Engineering & Construction Co., 1909 Minnesota Ave., S. E.; Blackford Co., 3606 11th St., N. W., both Washington, D. C.; York Construction Co., Box 306, Raleigh, N. C.; Angle-Blackford Co., North Carolina Bank Bldg., Greensboro, N. C.; Green & Stowe, 532 McDowell Sts., Welch, W. Va.

Tex., Laredo—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., has low bid from Frank F. Kinsey, Selma, Ala., for lawn sprinkler system at U. S. post office.

Tex., San Angelo—Following prospective estimators, U. S. post office, bids open June 22:

General Construction—Christy-Dolph Construction Company; Nathan Wohlfeld, Construction Building, all Dallas, Texas; Hiram Lloyd Building & Construction Co., Syndicate Trust Bldg.; C. H. Schroeder Build-

BUILDING NEWS

BUILDINGS PROPOSED

Churches

Ga., Atlanta—Bishop H. J. Mikell, Dean Raimundo DeOvies and Building Comm. of St. Philips' Cathedral, Hunter St., reported, plan erecting Episcopal Cathedral on Peachtree Road.

Md., Baltimore—Frederick Vernon Murphy, Prof. of Architecture, Catholic University of America, Washington, drawing plans for tentatively proposed new Cathedral for Roman Catholic Church on archdiocesan property on Charles St. Ave., near St. Mary's Seminary; buildings to include Cathedral, Archbishop's residence, residence for Cathedral clergy, school and convent; Archbishop Michael J. Curley, head of See.

Md., Baltimore—United Evangelical Church, Rev. F. W. Schaefer, Pastor, 923 S. East Ave., plans remodeling church and school and excavating under present buildings also underpinning; John Freund, 1307 St. Paul St., Archt.

Miss., Tupelo—Missionary Baptist Church, East Tupelo, reported, plans erecting church building; J. I. Berryhill, Chmn. Bldg. Comm.

City and County

Ala., Jasper—Additional prospective estimators, Walker County, Courthouse building, bids open June 21: Dye & Mullings, Columbia, Miss.; Southern Ferro Concrete Co., Atlanta, Ga.

Dwellings

Ala., Eufaula—S. A. Bullock plans erecting frame and brick residence, hardwood and tile floors; T. Firth Lockwood, Archt., 2111 Murrah Bldg., Columbus, Ga.

D. C., Washington—Lawrence Harry, has permit for 2-story dwelling 4517 River Road, N. W.

D. C., Washington—H. E. Davis, has permit for 2-story brick dwelling, 4722 Forty-sixth St., N. W.

D. C., Washington—W. F. Baker has permit for 2-story brick residence, 1206 Randolph St., N. E.

D. C., Washington—L. F. Brueninger & Sons, Inc., has permit for 2-story brick dwelling, 1370 Kalmia Road, N. W., cost \$10,500.

D. C., Washington—D. C. Gruver, 927 15th St., N. W., has permit for nine 2-story brick dwellings, 402-418 Ingraham St., N. W.; cost \$50,000.

D. C., Washington—Guy T. Scott, Jr., 4000 Cathedral Ave., has permit for 2½-story stone and clapboard residence, 4615 Loughborough road, N. W., cost \$30,000.

Fla., Miami Beach—Patrick Carroll, care C. B. Schoeppe, Archt., 528 Lincoln Rd., Miami Beach, plans residence and gate lodge on lot No. 2, Star Island, Miami Beach.

Ga., Atlanta—Chas. McGehee, 2788 Peachtree Rd., N. W., will erect duplex residence on St. Andrews Drive near Peachtree Rd.; cost \$17,500, 2-stories and basement, conc. foundation, brick veneer walls, slate roof, hardwood and tile floors, steam heat; plans from office of P. Thornton Marrye, Archt., 62 Barton St., N. W., Atlanta.

Ga., Atlanta—Maddox & Tisinger, 22 Candler Bldg., will erect 2-story and basement brick veneer residence, 1689 Noble Drive, N. E.; 8 rooms and 2 baths, comp. roof, hardwood and tile floors, steam heating.

La., New Orleans—R. J. Barry, 1125 Inde-

ing & Construction Co., 2800 N. Grand Blvd.; McCarthy Bros. Construction Co., Roosevelt Bldg.; Wm. MacDonald Construction Co., Syndicate Trust Bldg., all St. Louis, Mo.; Geo. E. Wieland, Travis Bldg., San Antonio, Tex.; Crown Iron Works, 1229 Tyler St., W. D. Lovell, 1415 8th St., S. E. Minneapolis, Minn.; Theriout Contracting Co., 534 E. Johnson St., Philadelphia, Penna.; H. M. Seby, 518 E. College Drive, Abilene, Tex.; H. W. Underhill Construction Co., Oliver Eakle Bldg., Amarillo, Tex.; Landis & Young, Box 244, Georgetown, Tex.; H. W. Underhill Construction Co., Wichita, Kans.; Glover & Boyington, Pampa, Tex.

Elevators—Otis Elevator Co., 810 18th St., N.W.; Gurney Elevator Co., Southern Bldg.; Haugton Elevator Co., Vermont Bldg.; A. B. See Elevator Co., 1343 H St., N.W., all Washington; W. A. Miller Elevator & Machinery Co., 920 N. Main St., St. Louis, Mo.; Atlantic Elevator Co., Erie Ave., and D St.; Westinghouse Electric Elevator Co., 30th and Walnut St., both Philadelphia, Penna.; Elevator Supplies Co., 1515 Willow Ave., Hoboken, N. J.; American Elevator & Machinery Co., 500 E. Main St., Louisville, Ky.; General Electric Co., Schenectady, N. Y.; Elevator Locks Co., 118 N. Washington Ave., Peoria, Ill.; Reliance Elevator Co., 218 W. Austin Ave., Chicago, Ill.; Gurney Elevator Co., 109 W. 64th St., New York.

Va., Harrisonburg—Treasury Dept., Jas. A. Wetmore, Act. Supv. Archt., Washington, opens bids June 24 for U. S. post office building.

Hospitals, Sanitoriums, Etc.

Ark., Fayetteville—Additional prospective estimators, Veterans Hospital, bids open June 21:

General Construction—Worsham Bros., Box 1115, Washington, D. C.; Batson-Cook Inc., West Point, Ga.; Rucks-Brandt Construction Co., 23rd and Arkansas River, Tulsa, Okla.; Permanent Construction Co., 208 S. La Salle St., Chicago, Ill.; J. L. Simmons Co., 917 E. Oakland Ave., Bloomington, Ill.;

Plumbing and Heating—Pfeifer Plumbing Co., 717 Main St., Little Rock, Ark.; E. M. Garmell Co., 1459 N. High St., Columbus, Ohio; Johnston Plumbing and Heating Co., 307 Towson St., Fort Smith, Ark.; Chas. E. Mumford, 6 Locust Ave., Fairmount, W. Va.; Kissel Bros., Inc., Hartford, Wis.; Bryce Plumbing and Heating Co., Florence, S. C.; Wahpeton Plumbing and Heating Co., Wahpeton, N. Dak.; Wm. Wilby, 1112 Dallas Ave., Selma, Ala.; H. P. Reger & Co., 1501 E. 72nd St., Chicago, Ill.; Downey Heating Co., 1729 St. Paul Ave., Milwaukee, Wis.; Philadelphia Piping & Equipment Co., 1605 Rockland St., Philadelphia, Pa.; Wallace Plumbing Co., 2214 Summer St., Dallas, Tex.; Jas. W. Partlan, 14290 Goodard Ave., Detroit, Mich.; G. W. Shirley, 10 E. 7th St., Van Buren, Ark.; J. D. Manley & Co., 514 College St., Springfield, Mo.; Industrial Heating and Plumbing Co., St. Joseph, Mo.; Ryan Plumbing & Heating Co., 403 Brady St., Davenport, Iowa; E. J. Young & Co., 416 W. Erie St., Chicago, Ill.; Thomas Heating Co., Racine, Wis.;

Elevator—Montgomery Elevator Co., Moline, Ill.;

Electrical—Griffin Elevator Co., 224 W. 23rd St., Oklahoma City, Okla.; D. C. Barnett, Box 353, Ft. Smith, Ark.; McElowney & Son, 111 N. Broadway, Oklahoma City, Okla.; C. R. Centro, 1058 W. Grand Ave., Decatur, Ill.; Toll Electric Co., 1210 Booker St., Little Rock, Ark.; Broome Electric Co., Box 1472, Amarillo, Tex.; N. E. Busby & Co., Dallas, Tex.; Dean Electric Construction Co., 1013 Garfield St., Oak Park, Ill.;

Tank—Chicago Bridge & Iron Works, 1616 Walnut St., Philadelphia, Pa.; W. E. Caldwell Co., 200 E. Brandeis St., Louisville, Ky.; Pittsburgh-Des Moines Steel Co., Neville Island P. O., Pittsburgh, Pa. 6-9

D. C., Washington—Department of Interior has low bids for following work for male receiving building, St. Elizabeths' Hospital:

General Contract—H. R. Blagg Co., Dayton, Ohio, \$633,300.

Elevator—Otis Elevator Co., 810 18th St., N. W., Washington, \$17,080.

Refrigerating Equipment—York Ice Machinery Corp., 1235 N. 44th St., Philadelphia, Pa., \$8628.

Ga., Augusta—U. S. Veterans' Administration, Washington, D.C. Construction Div. has low bid from Hillard Heating and Plumbing Co., Atlanta, Ga., at \$15,980, alt., add \$750 for boiler and fuel burning equipment at Veterans Hospital.

Md., Catonsville, Baltimore—State of Maryland, Spring Grove State Hospital, Bd. of Managers, opens bids July 8 for erecting building to be known as Infirmary building; plans from office of Henry Powell Hopkins, Archt., 10 E. Mulberry St., Baltimore.

Miss., Jackson—State Hospital Removal Improvement and Land Sale Comsn., Jackson, has low bid from Higgins Manufacturing Co., Newport, Ky., at \$37,595 for lum-

ber and screen wire for window screen and metal screens for building at New State Insane Hospital, Whitfield.

Tex., Galveston—See Want Section—Bids Asked, Plumbing Fixtures.

W. Va., Huntington—See Roads, Streets and Paving—Contracts Awarded.

Hotels and Apartments

Mo., St. Louis—F. J. Cornwell Real Estate Co., 111 N. Seventh St., reported, purchase the unfinished six-story conc. structure at N. E. corner of Eighth and Market Sts.; plans completing building.

S. C., Georgetown—See Stores.

Contractors, sub-contractors and suppliers of materials are urged to join in helping to stabilize the construction industry. Use the following label on all bids—It has the approval of responsible concerns:

IMPORTANT NOTICE

THIS IS OUR ROCK BOTTOM BID. IT IS NOT PADDED AND WILL NOT STAND A CUT.

Miscellaneous

Ala., Tuscaloosa—Kappa Delta Sorority, care Shaler Houser, University of Alabama, has low bid from J. O. Holloman, Tuscaloosa, for additions to Sorority House.

Ala., Tuscaloosa—Phi Mu Sorority, care Shaler Houser, University of Alabama, reported, plans erecting fraternity house, cost \$25,000; 2-stories, basement and attic, 70x55, conc. foundations, brick and frame walls, comp. roof, hardwood and tile floors; Miller & Martin, Archts., Title Bldg., Birmingham, Ala.

Fla., Clearwater—Bd. of Governors, Chamber of Commerce appointed H. H. Constantine on Comm. to plan for rebuilding of community building recently destroyed by fire.

Ga., Rome—May Realty Co. has permit to remodel building on Broad St.; est. cost \$10,000.

Schools

D. C., Washington—District Commrs. have low bid from North-Eastern Construction Co., 6 W. Madison St., Baltimore, Md., at \$162,261 for addition to Giddings School. 6-2

Fla., Gainesville—University of Florida, Dr. John J. Tigert, Pres., reported, plans erecting demonstration School and College of Education Bldg.; cost \$300,000; plans by Rudolph Weaver, Archt., Peabody Hall, Gainesville.

Ga., Atlanta—Fulton County, Bd. of Education, Jere Wells, Supt., Courthouse, Atlanta, has low bids for following schools:

East Rivers School—Carr Construction Co., Candler Bldg., Atlanta, at \$13,599; heating, Seckinger Bros., 180 Forsyth St., Atlanta, \$1700; Robert & Co., Archts., Bona Allen Bldg., Atlanta.

Hammond School—Smith-Pew Construction Co., 435 Irwin St., N. E., Atlanta, Ga., at \$21,725; heating, Seckinger Bros., \$3795. 6-2

Ga., Atlanta—Fulton County Bd. of Education, Jere Wells, Supt., Courthouse, Atlanta, announces architects selected for following schools:

Milton School—7-rooms, cost \$12,500, Arthur Neal Robinson, Candler Bldg.

East Point—Harris St. annex, cost \$12,500, Church St. annex, cost \$10,000, Ivey and Crook, Candler Bldg.

South Atlanta—6-room, cost \$8000, Jesse Wilhoit, Mortgage Guar. Bldg.

Rockdale School—6-room, cost \$8000, Henry H. Jordan, Glenn Bldg.

College Park School—7-room, cost \$8500, Haralson Bleckley, 815 Peachtree St. 4-14

Ga., Soperton—Board of Education and Treutlin School Building, reported, plan erecting new school building at Soperton.

Ga., Thomasville—Thomas County School

Commrs., J. D. Garrison, Supt., plans replacing 2 school buildings recently destroyed by fire.

La., Bastrop—Morehouse Parish School Bd., Bastrop, opens bids July 5 for repairing Bastrop grammar school building and waterproofing East and West Side schools; plans from J. W. Smith & Associates, Archts., Ouachita National Bank Bldg., Monroe, La.

La., Farmerville—Union Parish School, Dr. J. G. Taylor, Pres., P. L. Read, Sec., opens bids July 5 for erecting new school building on highway near Spencer; plans from office of school board after June 20.

La., New Orleans—Moise H. Goldstein, Archt., American Bank Bldg., reported, working on plans for group of education buildings for new Dillard Memorial University for negroes on Gentilly Ave., near London Ave.; buildings include administration building, library building and science building, dormitory, refectory and social hall, combination power plant and laundry structure, seven residences for faculty members, visitors' house and practice building.

La., Opelousas—Academy of Immaculate Conception receives bids June 21 for erecting 2-story, 81 x 125, pressed brick elementary and high school and auditorium building; separate bids received on plumbing and heating contract; rein. conc. foundation, built-up comp. roof, plastered walls, electric wiring, plumbing, steam heat, struc. steel, sheet metal work, millwork, hardware, painting, electric wiring, plumbing, blackboards; plans and specifications from Wm. T. Nolan, Archt., Canal Bank Bldg., New Orleans, La.

Md., Baltimore—See Want Section—Bids Asked—Painting.

Miss., Jackson—Rankin County, School Board, F. M. Lowther, Brandon, Miss., County Supt., opens bids July 5 for rebuilding of Pearl Consolidated School Bldg. on Highway No. 80, just east of Jackson; cost approximately \$18,000; 100x102, brick building with built-up comp. roof, plumbing, gas heating, electric wiring; plans from office of Claude H. Lindsley, Archt., Tower Bldg., Jackson. 6-9

Miss., New Albany—Bd. of Trustees, Jericho Consolidated School Dist., Union County, J. L. Wilson, County Supt., Courthouse Bldg., opens bids June 21 to erect 1-story, 5-room school building.

N. C., Charlotte—City, Charles Blackburn, Business Mgr., receives bids June 22 for erecting proposed Second Ward Negro school; separate bids to be received for plumbing, heating and electrical work; Louis H. Ashbury, Archt., 1520 E. Fourth St.; Mees and Mees, heating and ventilating Engrs., Court Arcade. 5-26

N. C., Charlotte—School Board, City Hall, opens bids June 22 for fireproof, brick school building; cost \$50,000; 2 stories, 55x150, wood and terrace floors, Barrett roof, conc. and brick foundation; Louis H. Ashbury, Archt., 1520 E. Fourth St.; plans from Chas. Blackburn, Sec., School Bd., City Hall. 5-26

Tenn., Nashville—Tennessee Agricultural and Industrial State College, W. J. Hale, Pres., reported, announced gifts totaling \$325,000 to be used for erecting new buildings.

W. Va., Charleston—Bd. of Education, Cabin Creek District, Kanawha County, Charleston, opens bids July 6 for erecting 1-room school building at Chesapeake, Cabin Creek Dist., and 5-room school building at Acme, Cabin Creek Dist.; plans from Walter P. Martens, Archt., 314 Medical Arts Bldg., Charleston, W. Va.

Stores

Ga., Albany—Goode Department Store plans erecting addition, conc. and brick, comp. roof; T. Firth Lockwood, Archt., 211 Murrah Bldg., Columbus, Ga.

Ga., Cartersville—W. C. Walton plans rebuilding commercial building recently destroyed by fire at loss of \$35,000; 2 stories and basement; Daniell & Beutell, Archts., Georgia Savings Bank Bldg., Atlanta, Ga.

Mo., Kansas City—Missouri Clothing and Jewelry Co., Benjamin Lieberman, Pres., leased southwest corner of Thirteenth St. and Grant Ave. for immediate expansion.

S. C., Georgetown—Harry Fogel has low bid from J. C. Heslep, Columbia, S. C., at \$28,000 for erecting hotel and store building; F. Arthur Hazard, Archt., Augusta, Ga.

Tex., El Paso—Given Bros., will expend \$15,000 remodeling at 310-21 East San Antonio St.

Warehouses

D. C., Washington—Beitzell & Co., Inc., 230 3rd St., N. W., has permit for 1-story brick and frame warehouse at 1357 New York Ave.; cost \$20,000.

BUILDING CONTRACTS AWARDED

Bank and Office

Ga., Atlanta—F. Graham Williams, Candler Bldg., let contract to Donald McIver, Candler Bldg., for office building on Boulevard St., N. E., near Piedmont Park; 1-story and basement, frame and stone; Jas. T. Mitchell, Archt., 140 Peachtree St., N. E.

Md., Baltimore—Following sub-contracts let for office building for Mutual Life Insurance Co. of Baltimore at Gay St. and North Ave.: Excavation and grading, Erhardt and May, 5723 Harford Rd.; steel and iron, Iron, Maryland Steel Products Co., 1001 N. Calvert St.; marble, tile and slate, Monumental Tile and Concrete Co., 1839 N. Milton Ave.; brick and stone mason, Harry E. Williams, 406 Rose-cott Terrace; carpentry and lumber, Jas. R. Degges, 253 S. Hilton St.; metal window trim, Walter S. Brauns, 509 N. Charles St.; roofing and sheet metal, William F. Zeller Co., 613 N. W. Cross St.; electric work, Goldenberg Bros., 721 N. Gay St.; plumbing, Henry L. Schmuft, 1841 N. Milton Ave.; heating, pect Ave., Catonsville; plastering, Edwin Maryland Plumbing and Heating Co., 56 Pros-longley, 2844 W. Lanvale St., all Baltimore; limestone, Paul W. Bounds Co., Sanger & Whitaker Sts., Philadelphia, Pa.; Howard F. Baldwin, Archt., Labella Ave., Ruxton; Engineering Contracting Co., Contr., 504½ St. Paul St.

Md., Baltimore—Central Savings Bank, Lexington and Charles Sts., let contract to Willard E. Harne, 2314 Oak St., for alterations; Archer & Allen, Archt., 3 E. Lexington St.

Dwellings

Fla., Clearwater—Dr. T. L. Fenn, 7 W. Madison St., Chicago, Ill., has permit for \$22,000 residence in Harbor Oaks; George Eichelberger, Inc., contr.; 2-stories, brick and hollow tile; Roy Wakeling, Archt.

Fla., Miami Beach—L. E. Johnson, Melrose, Mass., and 3701 Indian Creek Drive, Miami Beach, reported, let contract to G. Henry Hunt, Inc., 1636 S. W. Ninth St., Miami, for residence on Flamingo Terrace; est. cost \$20,000; C. B. Schoeppel, Archt., 528 Lincoln Rd.; expect to start work about July 15.

La., New Orleans—R. E. Baird, 1812 Gen. Pershing St., has permit for 1-story and basement dwelling, 6401 West End Bldg.; E. L. Markel, Archt., 3838 Louisiana Ave. Pkwy.; C. J. Barbara, Contr.

Md., Baltimore—Roland Park-Montebello Co., 2609 Greenmount Ave., let contract to T. V. Morgan, Inc., 10 E. Fayette St., for 3-story brick and shingle residence, 1111 Argonne Drive, Northwest; John H. Ahlers, Archt., 529 N. Charles St.

Md., Baltimore—Following sub-contracts let on alterations and additions to residence, 108 Ridgewood Road for Gideon N. Stieff, 17 N. Liberty St.: Stone work, Joseph Boggio, 13 N. Curley St.; conc. work, Operators Coal Co., Walter French, Towson, Md.; roof insulation, Johns-Manville Co., Baltimore Tr. Co. James S. Nussear, Jr., Archt., 9 E. Pleasant St.; L. L. Chambers, 36th St. and Roland Ave., Bldr.

Mo., St. Louis—Albert Miller, 4973 Merdell St., has permit for 2-story dwelling, 6228 Walsh St.; Koch-Hauptfisch, Bldr., 5335 Grace St.

Mo., St. Louis—Jeannette Vatterott, Box 45, Clayton, Mo., has permit for 2-story dwellings, 3804 and 3828 Burgen St.; Ball Lumber & Supply Co., Box 45, Clayton, Mo., Bldr.

Mo., St. Louis—N. S. Wood, Title Guaranty Bldg., has permit for 2-story brick dwelling, lot 16, Greenbrier Subdivision, St. Louis County, cost \$18,000; Geo. F. Bergfeld Co., Inc., Bldr., 3832 W. Pine St.; Nolte & Naumann, Archt., 3832 W. Pine St.

Government and State

D. C., Bolling Field, Anacostia—Constructing Quartermaster, Capt. J. L. Alverson, let contracts for 4 buildings to Harman Engineering Co., 844 Rush St., Chicago, Ill.

D. C., Washington—American Bridge Co., 71 Broadway, New York, has contract for 7500 tons fabricated struc. steel for remodeling and enlarging U. S. post office; B. W. Construction Co., 720 N. Wabash Ave., Chicago, Ill., Gen. Contr.

D. C., Washington—Fort Pitt Bridge Works Co., Oliver Bldg., Pittsburgh, Pa., has contract for 11,000 tons fabricated struc. steel for Interstate Commerce Commission and Department of Labor Building; Great Lakes Construction Co., 333 N. Michigan Ave., Chicago, Ill., Gen. Contr.

D. C., Washington—Fort Pitt Bridge Works

Co., Oliver Bldg., Pittsburgh, Pa., has contract for 10,000 tons fabricated struc. steel for U. S. post office Department Building; McCloskey & Co., Inc., 1620 W. Thompson St., Philadelphia, Pa., Gen. Contr.

D. C., Washington—Gray Knox Marble Co., Sutherland Ave., Knoxville, Tenn., has contract for furnishing champion pink Tennessee marble for exterior and interior of Post Office Department Building; McCloskey & Co., 1620 W. Thompson St., Chicago, Ill., Gen. Contr.

D. C., Washington—Gray Knox Marble Co., Sutherland Ave., Knoxville, Tenn., has contract for marble for United States Supreme Court Building; Geo. A. Fuller Co., Munsey Bldg., Washington, Gen. Contr.

D. C., Washington—Following sub-contracts let for addition to Library of Congress: Electric work, Harry Alexander, Inc., 1800 E St., N. W.; plumbing, D. C. Engineering Co.; elevators, Otis Elevator Co., 810 18th St., N. W., all Washington; architectural terra cotta, Federal Seaboard Terra Cotta Corp., South Amboy, N. J.; concrete, Eastham-Melvin Co., 844 Rush St., Chicago, Ill.; masonry, Jos. L. Boozie & Co., 12 W. Madison St.; stone setting, Seymour Ruff & Sons, 2133 Maryland Ave.; refrigeration, Paul J. Vincent Co., 3807 Beach Ave., all Baltimore, Md.; interior stone and marble, Andres Stone and Marble Co., Milwaukee, Wis.; granite, John Clark Co., Rockville, Minn.; Jacobson Brothers Co., 19 S. LaSalle St., Chicago, Ill., Gen. Contr.

Fla., Miami—Miami Tile and Marble Co., 1038 E. Second Ave., Miami, has contract for tile work and George E. Bunnello has piling and seawall work for U. S. Quarantine Station; Prescott-White Corp., 121 E. 27th St., New York, Gen. Contr.

Ga., Fort Benning, Columbus—Following contracts let for construction work at Fort Benning: Electric wiring and fixtures, Walker Electrical Co.; struc. steel, Pekor Iron Works; plastering, J. R. Green Plastering Co., Inc.; heating and ventilating equipment, L. D. Herndon Co.; window shades for barrack buildings, Martin Furniture Co.; quarry tile floor, Columbus Tile and Marble Works, all Columbus, Ga.

La., Baton Rouge—Laclede Steel Co., Arcade Bldg., St. Louis, Mo., has contract for 135 tons conc. bars for U. S. post office; Algernon Blair, First National Bank Bldg., Montgomery, Ala., Gen. Contr.

La., Baton Rouge—Southern G. F. Co., 263 Decatur St., Atlanta, Ga., has contract for rein. steel to be furnished by Laclede Steel Co., Arcade Bldg., St. Louis, Mo., for U. S. post office; Algernon Blair, First National Bank Bldg., Montgomery, Ala., Gen. Contr.

Miss., Meridian—Connors Steel Co., Empire Bldg., Birmingham, Ala., has contract for 200 tons rein. steel for U. S. Post Office; Ralph Sollitt and Sons, South Bend, Ind., Gen. Contr.

Mo., Jefferson City—Treasury Dept., Jas. A. Wetmore, Act. Supv. Archt., Washington, let contract to A. W. Kutsche & Co., 2111 Woodward Ave., Detroit, Mich., at \$249,000 for U. S. post office, including colonnade on west elevation.

N. C., Salisbury—Treasury Dept., Jas. A. Wetmore, Act. Supv. Archt., Washington, has low bid from Otis Elevator Co., 810 18th St., N. W., Washington, at \$6168 for elevator for U. S. post office building.

Tenn., Chattanooga—Treasury Dept., Jas. A. Wetmore, Act. Supv. Archt., Washington, let contract to Otis Elevator Co., 810 18th St., N. W., Washington, D. C., for \$22,800 for installing elevator plant at U. S. post office and court house.

Tenn., Chattanooga—Connors Steel Co., Empire Bldg., Birmingham, Ala., has contract for 170 tons for U. S. post office; Ralph Sollitt and Sons, South Bend, Ind., Gen. Contr.

Tex., Galveston—D. M. Harwood Co., Galveston, Tex., has contract for excavating and foundations for Quarantine Station; James McHugh Sons, Gen. Contr., 849 W. 70th St., Chicago, Ill.

Va., Lynchburg—Globe Wrecking Co., Chicago, Ill., has contract for wrecking 5 buildings on site of U. S. post office; Virginia Bridge and Iron Co., Madison Ave., N. E., Roanoke, Va., has contract for 400 tons struc. steel; Ralph Sollitt & Sons, South Bend, Ind., Gen. Contr.

Hospitals, Sanitoriums, Etc.

Md., Baltimore—Kalmann Steel Co., Inc., 410 N. Michigan Ave., Chicago, Ill., has contract for 630 tons rein. steel for U. S. Marine

hospital; W. E. O'Neil Construction Co., 308 Washington St., Chicago, Ill., Gen. Contr.

Md., Baltimore—Following sub-contracts let City Hospital, Bay View—Common brick, Burns & Russell Co., American Bldg.; placing rein. steel, Joseph Torre, 2328 E. Fayette St.; incinerators, Kerner Incinerator Co., 506 St. Paul St.; snap tys and wedges, H. H. Meyer Co., 110 S. Howard St.; interior waterproofing, Truscon Laboratories, 10 W. Chase St.; Palmer & Lamden, Archt., 513 N. Charles St.; Van Renssaler Saxe, 217 N. Calvert St.; Struc. Engr.; Reeder, Eiser and Aikens, 916 N. Charles St., Mech. Engr.; J. Henry Miller, 405 W. Franklin St., Gen. Contr.

Md., Glendale—District Commrs., Room 427 District Bldg., Washington, let contract to McCormick, Lenham, 40th and Chestnut Sts., Philadelphia, Penna., at \$323,000 for refrigeration building and nurses home at Children's Tubercular Sanatorium, Buena Vista, near Glen Dale; A. L. Harris, Archt., care District Commrs.

N. C., Elkin—Hugh Chatham Memorial Hospital let contract to Frank L. Blum Co., 860 W. 4½ St., Winston-Salem, for nurses' and resident surgeons' home; approximate cost \$25,000.

Tenn., Chattanooga—Signal Sprinkler and Heating Co., 211 E. 10th St., has contract for installing sprinkling system in Erlanger Hospital.

Hotels and Apartments

Mo., St. Louis—Chas. A. Timmerberg, 40353 Couteau St., has permit for 2 stories and tenement building, 4025-25A Couteau Ave.; George C. Smith, Bldr., 1620 Quendo St.; Wm. P. McMahon, Archt., 719 Buder Bldg.

Miscellaneous

Ala., Tuscaloosa—D. T. Underwood, 406 Cliff Place, Birmingham, reported, has contract for Alpha Phi Sorority house at University at \$17,500; 2-story, brick veneer.

Schools

D. C., Washington—Lehigh Structural Steel Co., Allentown, Penn., has contract for 500 tons fabricated struc. steel for Science Building, Georgetown University; Charles H. Tompkins Co., 1608 K St., N. W., Washington, Gen. Contr.

Ga., Atlanta—Smith-Pew Construction Co., 435 Irwin St., has contract for Hammond School, Sandy Springs, \$21,725, from Fulton County Board of Education.

La., New Orleans—Olympia Roofing Co., 321 Burgundy St., New Orleans, has contract for roof for parochial school for Most Holy Name of Jesus Roman Catholic Church, Cromwell Place, between Calhoun St. and Loyola University Proprietary; Rathbone Debuys, Archt., Hibernia Bank Bldg.; Lionel F. Favret, 937 Gravier St., Gen. Contr.

Md., Annapolis—Anne Arundel County School Commrs., Geo. Fox, Supt., Annapolis, let contracts for following schools:

Ferndale—2 classrooms, kindergarten, assembly hall, minor additions to present building and new heating plant, Hollyday & Stahl, 522 Park Ave., Baltimore.

Odenton—4 classrooms, assembly hall, toilets and heating plant, Hollyday & Stahl, 522 Park Ave., Baltimore. W. H. Emory, Jr., Baltimore Trust Bldg., Buckler & Fenhagen, 325 N. Charles St., Asso. Archts. for both buildings.

Md., Laurel—District Commrs., Room 509 District Building, Washington, let contract to Frank Pecora Construction Co., 4006 Eldorado Ave., Baltimore, Md., at \$28,000 for heating plant alteration and distribution system at District Training School.

Okla., Platter—Renshaw and Nelms, Durant, Okla., have contract for erecting brick school building at Platter; 5-classrooms, auditorium, gymnasium, library and office.

Okla., Welch—Bd. of Education let contract to Brittin & Barger, Miami, for brick school building. Following sub-contracts let: Millwork, Southern Mill and Manufacturing Co., 525 S. Boost St.; brick, Frank Buskett, both Tulsa; steel, N. American Car Corp., Coffeyville, Kans.; heating and plumbing, McCoy Plumbing and Heating Co., Baxter Springs; wiring, Miami Electric Co., Miami, Butler Co., Archts., Insurance Bldg., Oklahoma City.

S. C., Columbia—Benedict College, Harden, has permit for 2-story brick auditorium, north-east corner Harden and Taylor Sts.; cost \$11,000.

Va., Newport—Giles County School Bd., Pearisburg, let contract to C. D. Croye, Pearisburg, Va., for \$40,000 school building.

Stores

Fla., Sarasota—S. H. Kress & Co., 114 Fifth Ave., New York, reported, let contract to G. A. Miller, Petteway Bldg., Tampa, Fla., to erect store building at Sarasota; struc. and rein. conc., fronting on Main St., orn. terra cotta with modern designs for front.

4-21

Mo., St. Louis—David D. Israel, 14 N. 18th St., has permit for alterations to 3-story store building, 1500-25 Market St.; Rucker Construction Co., Bldrs., 17 N. 10th St.

Mo., St. Louis—See Hotels and Apartments.

Okla., Oklahoma City—T. H. White, Hales Bldg., reported, let contract to Western Construction Co., Hales Bldg., for \$25,000 brick store building.

5-26

Theatres

Ga., Atlanta—De Give Investment Co., Grand Bldg., has permit for reconstruction of Grand Theater for Loew's Inc., to be done by day labor; cost \$225,000; Thomas W. Lamb, Inc., Archt., 701 Seventh Ave., New York.

5-12

Warehouses

Ga., Statesboro—E. A. Smith Grain Co. are erecting 1-story, brick, open joist cotton warehouse; sprinkler system to be installed by Automatic Sprinkler Corp., 161 Spring St., N. W., Atlanta, and Cleveland, Ohio.

Md., Baltimore—F. A. Davis & Son, 119-21 S. Howard St., filed plans with Bureau of Buildings to build additional story to warehouse making building 4-stories; est. cost \$14,000; J. Raymond Gerwig & Son, 22 S. Liberty St., Contr.

5-19

Miss., Ellisville—Ellisville Trading Co., T. E. Wood, is erecting modern warehouse.

WANT SECTION

THE CLASSIFICATIONS IN THIS SECTION ARE:

Machinery and Supplies

Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.

Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.

Building Materials and Equipment

This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.

Bids Asked

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

Machinery and Supplies

Crane (Locomotive).—Atlantic Engineering Co., 185 17th St., N. E., Atlanta, Ga.—Wants prices and data on used 35 or 40-ton locomotive crane.

Engine Generator Set.—Atlantic Engineering Co., 185 17th St., N. E., Atlanta, Ga.—Want 1 used 250-kw. engine, generating set, 3 phase, 60 cycle, 550 volts, to operate at 125 lb. initial steam pressure and 10 lb. back pressure, preferably Skinner Uniflow engine; also 300, 400 and 500-kw. Uniflow generating units.

Tank.—Burch Bros., McKey Bldg., Dublin, Ga.—Wants prices on 3/16 in. steel storage tank, 10,000 to 12,000 gal. capacity.

Miscellaneous

Aeroglide Corp., Broadus Wilson, Jones and West Sts., Raleigh, N. C.—Wants prices on following: About 1000 lbs. $\frac{3}{8}$ in. rope; $\frac{1}{4}$ in. laminated ply wood.

Metal Signs.—Chamber of Commerce, H. C. Fondren, Mgr., Jennings, La.—Wants prices on metal signs, enameled and otherwise.

Pipe.—Alleghany Slag Products Co., Buena Vista, Va.—Wants prices on approximately 5000 ft. 2 in., 2½ in., 3 in. and 4 in. black pipe, second hand in good condition with couplings, Byers or other grade pipe.

Trailers.—F. H. Beard, Bethume, S. C.—Wants prices on camp trailer cars, including complete equipment.

Waste (Rag) Machine.—J. E. Bumgarner, 613 Julia St., New Orleans, La.—Wants data and prices from manufacturers or dealers who handle machines for making shredded waste from rags.

Building Material and Equipment

Vorhees College, Denmark, S. C.—Wants prices on following for dormitory:

Cast Stone
Hardwood Floors
Metal Doors
Asbestos Shingle Roof.
Gypsum Tile.

Bids Asked

Automobile.—Purchasing Office, Department of the Interior, Washington, D. C.—Bids June 23 for 1-automobile and 1-truck.

Bridges, Roads.—Dept. of Highways, Richmond, Va.—Bids June 28 for 11 roads and 4 bridges. See Roads, Streets, Paving and Bridges, Culverts and Viaducts—Proposed.

Coal.—U. S. Engineer Office, First Dist., New York—Bids June 20 for 450 tons bituminous steam coal, Cir. 339; and 200 tons pea coal, Cir. 340.

Drainage Project.—U. S. Engineer Office, 333 N. Michigan Ave., Chicago, Ill.—Bids June 22 for construction of Goose Lake drainage project in Grundy County, Ill., Cir. 149.

Dredging.—U. S. Engineer Office, First District, Chicago, Ill.—Bids July 1 for dredging 76,670 cu. yds. material from Illinois River.

Dredging.—U. S. Engr. Office, 500 Custom House, Baltimore, Md.—Bids July 11 for dredging in cutoff section of channel leading to Baltimore, material estimated to measure approximately 953,000 cu. yds. scow measure.

Dredging.—U. S. Engineer Office, Room 615, 39 Whitehall St., New York—Bids June 28 for dredging 277,000 cu. yds. material in Passaic River, N. J., Cir. 32.

Dredging.—U. S. Engineer Office, Seattle, Wash.—Bids June 30 for dredging approximately 366,000 cu. yds. material, Duwamish waterway, Seattle Harbor, Wash.

Elevator.—Veterans Administration, Room 764, Arlington Bldg., Washington, D. C.—Bids July 5 for electric elevator in addition to Bldg. No. 9, Veterans Administration Hospital, Sheridan, Wyoming.

Elevators.—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids June 20 for repairs to 4 passenger elevators in Treasury Bldg., Washington, D. C.

Excavation and Dredging.—U. S. Engineer Office, Chicago, Ill.—Bids July 1 for approximately 76,670 cu. yds. earth in Illinois River, Ill., Cir. 148.

Fountain.—Office of David Lynn, Archt. of Capitol, Washington, D. C.—Bids June 20 for re-erection of Bartholdi Fountain in Square 578, Botanic Garden, including conc., electrical and plumbing work in connection therewith; drawings and information on application.

Gasoline Fuel System.—Constructing Quartermaster, Depot, Jeffersonville, Ind.—Bids June 27 for erecting and completing gasoline fueling system at Bowman Field, Ky.

Grading.—Office Constructing Quartermaster, Bolling Field, D. C.—Bids June 24 for grading, leveling and improving southerly half of old flying field.

Granite Coping.—Office of Architect of the Capitol, Washington—Bids June 21 for constructing granite coping at back of sidewalk on Delaware Ave. and on C St., N. E., adjoining Senate Office Bldg.; plans from David Lynn, Archt. of the Capitol.

Highway Supplies, etc.—State Highway Comsn., E. D. Kenna, Director, Jackson, Miss.—Bids June 21 for hauling gravel and clay; furnishing gravel and sand, gasoline and kerosene, motor oils, lubricating greases, creosoted piling, ZMA lumber Wolmanized lumber, tires and tubes, paints, road signs and markers, sign posts, road oils, asphalt and tars.

Insect Screens.—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids June 21 for insect screens for marine hospital, Key West, Fla.

Infirmary.—Catonsville, Baltimore, Md. July 8—See Buildings Proposed—Hospitals, Sanatoriums, Etc.

Interior Lighting Fixtures.—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids July 6, U. S. post office, Findlay, Ohio.

Interior Lighting Fixtures.—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids July 6 for furnishing and installing fixtures, U. S. post office, courthouse, jail, etc., Fairbanks, Alaska.

Machine.—Bureau of Prisons, Department of Justice, Washington—Bids June 22 for 1-rotary cloth cutting machine, for Lewisburg, Sched. 667.

Metal Shelving Cabinets, etc.—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt.,

Washington, D. C.—Bids June 28, U. S. post office, Scranton, Pa.

Motor Boats.—War Dept., United States Engineer Office, P. O. Box 97, Memphis, Tenn.—Bids June 28 for furnishing and delivering afloat at Memphis three 31-ft. steel hull motor boats.

Mower.—Supt., Salem Indian School, Chemawa, Oreg.—Bids June 20 for 1 power lawn mower.

Oil Storage System, etc.—Office of Constructing Quartermaster, Barksdale Field, Shreveport, La.—Bids June 20 for constructing oil storage system, alterations to present paint, oil and dope house and heater room addition.

Painting.—Custodian, U. S. custom house, Mobile, Ala.—Bids postponed from June 28 to Aug. 23 for painting interior and exterior of building.

Painting.—Bd. of Awards office of City Register, E. H. Beer, City Hall, Baltimore, Md.—Bids June 22 for painting plastered surfaces of schools in Groups No. 4 and 5.

Paved Apron, Roads, etc.—War Dept., Constructing Quartermaster, Langley Field, Va.—Bids June 24 for furnishing labor, material and constructing paved apron, roads and sidewalks in Heavier-than-Air section at Langley Field.

PANAMA CANAL. Office of General Purchasing Officer, Washington, D. C.—Bids June 23 for Sch. 2760, including:

Steel, pipe, pipe fittings, railing fittings, lavatories, metal valves, cocks, welding rods, fuse-clip terminals, cartridge fuses, fuller board, resistance wire, portable cord, cotton rope, forges, bank saws, smokestack netting, grommets, staples, industrial thermometers, chinaware plates, agateware cups, duck ponds, gas hose, leather belting, oil cloth, glue and linen thread.

PANAMA CANAL. General Purchasing Officer, Washington, D. C.—Bids June 30 for Sch. 276, including following:

Automobile truck, water meters, watt-hour meters, electric fans, transformer light reflectors, water pumps, roofing copper, corrugated metal roofing, wire rope, wire, cable clips, pipe fittings, range boilers, kitchen sinks, sink traps, flush-tank levers, flush pipe, valves, cocks, glass, poultry netting, wire cloth, clocks, pressure gauges, folding cots, cars, rubber boots, glove fasteners, cotton batting, linoleum, burlap, cotton sheeting, rubbing felt, leather, artificial leather, packing, cocoa fiber, paint thinner, bituminous emulsion, floor wax, flint paper, emery cloth, pencils, rice straw and oats.

Post Office.—Harrisonburg, Va.—June 24. See Building News Proposed—Government and State.

Post Office.—Andalusia, Ala., June 28. See Building News Proposed—Government and State.

Post Office.—Tifton, Ga., June 28. See Building News Proposed—Government and State.

Plumbing Fixtures.—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids June 21 for furnishing all labor and materials for extra plumbing fixtures for U. S. Marine Hospital, Galveston, Tex.

Pumping Set.—Chief of Engineers, Munitions Bldg., Washington—Bids June 21 for

2-portable pumping sets, gasoline engine driven, Cir. 47.

Pump House—U. S. Engineer Office, 333 N. Michigan Ave., Chicago, Ill.—Bids June 22 rein. conc. and brick pump house, conc. retaining walls, 3-irrigation pumps, etc. Cir. 150.

Roads, Sidewalks and Driveways—July 12. See Buildings Proposed—Government and State.

Riprap Stone—War Dept., Engineer Department at Large, U. S. Engineer Office, P. O. Box 97, Memphis, Tenn.—Bids June 22 to furnish 16,000 cu. yd. riprap stone; Serial No. 32-685.

Schools—Bastrop, La., July 5—See Buildings Proposed—Schools.

Schools—Charleston, W. Va. Bids July 6. See Building News Proposed—Schools.

School—Jackson, Miss., July 5—See Building News Proposed—Schools.

Seeding and Planting—Custodian, U. S. post office, Sandersville, Ga.—Bids June 22.

Settling Basin—Constructing Quartermaster, Fort Bliss, Tex.—Bids June 20 for constructing conc. settling basin with necessary connection complete at post pumping station; cost \$15,000.

Sewer Construction—Bd. of Awards, Baltimore, Md., George E. Finck, Sewerage Engr.—Bids June 22 for building sanitary sewers and storm water drains, Storm Water Contr. 177, under funds allotted by Public Improvement Comsn.; work includes 205 ft. of 8x8-ft. rectangular rein. conc. drain; 4900 ft. 24-in. to 48-in. diam. rein. conc. pipe drain; 265 ft. 27-in. diam. vit. pipe drain; 365 ft. 24-in. diam. c. i. pipe drain; 3695 ft. 18-in. and 21-in. diam. vit. pipe drain; 2260 ft. 15-in. diam. vit. pipe drain; 1795 ft. 10-in. and 12-in. diam. vit. pipe sewer; house connections; standard manholes; other miscellaneous articles; plans \$5.

Sewage Disposal Plant—City of Tyler, Tex., Lee H. Powell, City Mgr.—Bids June 24 for constructing addition to sewer disposal plant.

Shoe Machinery—Department of Interior, Supt., Salem Indian School, Chemawa, Oreg.—Bids June 18 for 1-shoe stitcher and 1 shoe finisher.

Subsistence—U. S. Engineer Office, Huntington, W. Va.—Bids June 20 for subsistence supplies for floating plant.

Surface Treatment—War Dept., Third Corps Area, U. S. Army, Quartermaster, Baltimore, Md.—Bids June 20 for surface treating roads in National Military Park, Gettysburg, Pa.

Toilets—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids June 21 for new toilets and office on 4th floor, U. S. post office and court house, Martinsburg, W. Va.

Vitrol, Etc.—Bureau of Prisons, Department of Justice, Washington—Bids June 22 for 2,350 lb. blue vitrol and 300 lb. powdered arsenate lead, Schd. 668.

Water Mains—Bd. of Awards, Baltimore, Md., Leon Small, Water Eng.—Bids June 22 for excavating and backfilling trenches and furnishing and installing 36-in. middle service water main in Clifton Park, Mine Lane and Gay St., from Sta. 4825 to North Ave.; plans \$5; funds for this work allotted by Public Improvement Comsn.

Window Shades and Drapery Rods—Office Constructing Quartermaster, Langley Field, Va.—Bids June 24 for manufacture and installation of window shades and drapery rods in four double and 6 single Company Officers' quarters.

Water Supply System—District Commrs., Washington, D. C.—Bids June 20 for furnishing and installing water supply system at District Training School, Laurel, Md.

Waterproofing—District Commrs., Washington, D. C.—Bids June 17 for waterproofing sewage disposal plant at D. C. Reformatory, Lorton, Va.

DEPARTMENT OF AGRICULTURE, Washington—Bids as indicated on following:

Automobile Truck—Sumner, Wash., June 21, Proj. 2064

Binocular Microscope—Washington, June 21, Proj. 2086

DEPARTMENT OF EDUCATION, BOARD OF SCHOOL COMMRs., Baltimore, Md.—Bids June 22 for following:

Elevator Shaft Entrances—Remove entrances to all floors and replacing with hollow steel entrances of single swing type in School No. 293, Howard and Centre Sts.

Laboratory—Installation of laboratory dis-

tribution panel and misc. changes in equipment at School 403, North Ave. and Calvert St.

Electric Wiring and Fixtures—Schools 15, 221, 40E, 53, 113 and 49

Interior Painting—East and west wings, Baltimore Polytechnic Institute, North Ave. and Calvert St.

HEADQUARTERS, U. S. MARINE CORPS, Navy Bldg., Washington, D. C.—Bids on dates indicated, delivery as stated, for following:

Gas Ranges—6, Philadelphia, Penna., June 23, Schd. 960

Dish Trucks—5, Portsmouth, Va., Schd. 969

Brick and Cast Stone—Quantico, Va., June 24, Sch. 974

Cakes, Crackers, etc.—Quantico, Va., June 24, Schd. 12-1933

Gasoline, Kerosene, Fuel Oil—Various posts, June 23, Schd. 19-1933

Gasoline—14,000 gals., Camp Rapidan, Va., June 23, Schd. 15-1933.

HEADQUARTERS U. S. MARINE CORPS, 1100 S. Broad St., Philadelphia, Pa.—Bids on dates indicated for following:

Stove Polish—6000 cakes, June 24, Schd. 969

Batteries—24,000, June 30, Schd. 18-1933

Caustic Soda—40,000 lb., June 30, Schd. 20-1933

Fly Paper—40,000 sheets, June 24, Schd. 21-1933

Tape—6000 lb., June 30, Schd. 22-1933.

U. S. COAST GUARD HEADQUARTERS, Washington, D. C.—Bids on date indicated for following:

Speed Recording Equipment—High speed recording equipment, in lots of 3, 4, 5 and 6 C. G. Spec. RRS-137, June 21.

Truck Chassis—1-gasoline motor propelled and telephone line construction body to mount chassis, June 20.

U. S. DEPARTMENT OF COMMERCE, Division of Purchases and Sales, Washington—Bids as indicated on following:

Buildings—10 to 30 buildings for use radio marker or receiving station, Proj. 24,492, June 20.

Transmitting Equipment—20 to 40 high-frequency aircraft radio telephone and telegraph equipment, Proj. 24,493, June 20.

U. S. MARINE CORPS, QUARTERMASTER, 1100 S. Broad St., Philadelphia, Pa.—Bids June 22 on following:

Rope—4000 lb. manila, Schd. 955

Scabbards—204, Schd. 956.

U. S. MARINE CORPS, OFFICE OF QUARTERMASTER, Navy Bldg., Washington, D. C.—Bids on dates indicated for following:

Asphalt—1200 gals., Quantico, Va., June 22, Schd. 952

Woodworking Machines—Quantico, Va., June 23, Schd. 961

Tractor and Trailers—Quantico, Va., June 24, Schd. 959

Cereals—Quantico, Va., Parris Island, S. C., and Hampton Roads, Norfolk, Va., June 22, Schd. 11-1933

Forage—Various posts, June 23, Schd. 17-1933.

U. S. MARINE CORPS, NAVY BUILDING, Washington, D. C.—Bids on dates indicated for following:

Radio Tubes—Washington, D. C., June 23, Schd. 965

Patrol Radio Set—Thirty, Washington, June 24, Schd. 966

Electric Supplies—Quantico, Va., June 24, Schd. 967

Steel Door, Windows, etc.—Quantico, Va., June 24, Schd. 975

Wire Netting, etc.—Quantico, Va., June 22, Schd. 978

Iron Pipe, Fittings, etc.—Quantico, Va., June 24, Schd. 979

Lumber (Yellow Pine)—Quantico, Va., June 24, Schd. 981.

U. S. NAVY DEPARTMENT, BUREAU OF SUPPLIES AND ACCOUNTS, Washington, D. C.—Bids June 21 for following:

Paint Sprayer Outfits—15, Mare Island, Calif. Schd. 8153.

Chisels—Machinists' chisels, chisel blanks and pneumatic chisels, Schd. 8171.

Blades—Tungsten hacksaw, Brooklyn and Mare Island, Schd. 8172.

Drills and Spare Brushes—4 motor-driven, sensitive for east and west yards, Schd. 8184.

Sharpening Stone—For east and west yards, Schd. 8185.

Fire Extinguishers—410 Portable for Brooklyn and Hampton Roads, Schd. 8196.

Sand—100 tons fire sand, 100 tons molding

sand and 100 tons do. and 100 tons do., Schd. 8137.

Hand Shovels—East and West Yards, Schd. 8198.

Aircraft Plotters—600 for Washington, Schd. 8230.

Rules and Tapes—for East and West Yards, Schd. 8203.

Shears—Tanners and sailmakers, Schd. 8302.

Pneumatic Sealing Hammers—For Philadelphia and Puget Sound, 39, Schd. 8200.

Steel Plates and Shapes—Galvanized, Schd. 8277.

Tableware—Silver-plated and nickel-silver for Brooklyn, Schd. 83333.

DIVISION OF PURCHASE AND CONTRACT, Raleigh, N. C.—Bids June 21 on following:

Nails—Contract R-205

Axle Steel—Contract R-3446

Brushes—Contract R-4261

Nails—Contract R-195.

OFFICE CONSTRUCTING QUARTERMASTER, Barksdale Field, Shreveport, La.—Bids June 30 for following:

Aprons

Runways

Electrical Conduits

Streets

Sidewalks

Service Roads

Drains

Air and Water Service Pits.

U. S. MARINE CORPS, Washington, D. C.—Bids on dates indicated for following:

Hardware—Quantico, Va., June 24, Schd. 976

Electrical Supplies—Quantico, Va., June 23, Schd. 982

Subsistence Stores—Various posts, June 24, Schd. 983

Peas (Canned)—Various posts, June 27, Schd. 987

Reel Unit (Power Driven)—Washington, D. C., or Philadelphia, Pa., June 23, Schd. 988

Asphalt—Quantico, Va., June 24, Schd. 989

Roofing Materials, etc.—Quantico, Va., June 23, Schd. 991

Soda (Ash)—Quantico, Va., June 23, Schd. 995

Rope (Wire)—Quantico, Va., June 23, Schd. 996

Plumbing Supplies—Quantico, Va., June 24, Schd. 999

Miscellaneous Supplies—Quantico, Va., Schd. 997.

Ten Industries Locate on Katy Lines in Month

St. Louis, Mo.—Ten industries located in May on lines served by the Missouri-Kansas-Texas Lines are estimated to have brought an added investment of \$120,150, and are expected to originate 4307 cars of new revenue freight annually, besides creating 76 new jobs, according to the publicity department of the railroad. Industries include the following: Refiners Production Co., Oklahoma City; bulk oil station of Parsons Mill & Elevator Co., at Parsons; sand and gravel yard of the Kermit W. Ing-ham Lumber Co., Yale, Okla.; unloading racks of the Skidmore-Milton Oil Co., Kansas City; Lawson Rubber Co., rubber reclamation plant, Houston; Foodtown Kitchens, Inc., distributors of cereals, Dallas; Century Bridge & Culvert Co., creosoted culvert manufacturing plant, Denison; Redman & Langdon, bagging and ties, Houston; E. Blankenstein, cement storage yard, Sealy, Texas; Sandusky Cooperage & Lumber Co., barrel factory, Dallas.

INDUSTRIAL NEWS

District Sales Manager

Youngstown Sheet and Tube Company, W. E. Watson, vice-president, Youngstown, Ohio, announces the appointment of Lew E. Wallace as New York district sales manager, succeeding W. B. Flowers, who will continue with the company as special representative located in New York.

Quick-Index File for Desk Use

The Art Metal Construction Company, Jamestown, N. Y., has issued a poster devoted to the Quik-Index file for desk purposes, having a capacity of 240 one-line items for names, numbers, prices, stock, production follow-up, or for any quick reference purpose. The file may be kept on the desk or hung up as desired.

Reo Motor Dealer Appointments

The Reo Motor Car Company, Lansing, Mich., announces a number of dealer appointments, including the Brown Motor Company, Sandy Springs, Md., and Haselden Bros., Lancaster, Ky., and other dealers in various states. Through its distributor, Thomas J. Hay, Inc., Chicago, it also announces appointment of four dealers for the Chicago territory.

New Engineering Service

George C. Bryan and John C. Terhune, formerly with Lockwood Greene Engineers, Inc., announce their association under the name of Bryan & Terhune, with offices at No. 2 Rector street, New York. The new firm will provide engineering service for industrial plants, improvement of layout, machinery, steam plant and process construction plans and supervision, and supply estimates and reports.

Patent Fuel Tested in England

Tests by the Farraday House Testing Laboratories, London, England, of Patent Fuel recently developed in England by the Eclipse Fuel Company, are said to show that the use of the new fuel would effect a saving of 9 minutes in raising steam to 100 pounds pressure per square inch. Harold Macklin, architect of Winston-Salem, N. C., holds an offer for the sale of American rights to the patent.

500,000 Cotton Bag Order

Regarded as a step forward in the movement to secure increased consumption of Southern cotton and other Southern products, the Fulton Bag & Cotton Mills, Dallas, Tex., has received an order for the manufacture of 500,000 cotton bags for the Tex-O-Kan Feed Mills, according to an announcement by Col. W. E. Talbot, agency-manager of Southland Life Insurance Company and managing director of the Southwest Industrial Development Bureau, Dallas, who acted as intermediary in the transaction.

Washington Gas Light Head

Marcy L. Sperry has been elected president of Washington Gas Light Company, Washington, D. C., and will go to this position from the Fall River Gas Works Company, Fall River, Mass., where he served as vice-president in charge of operations. Before that he was associated with Stone & Webster at Savannah, Ga. For the past several years, with headquarters in Boston, he has had active supervision of operations of a number of gas and electric companies.

Orders 550 Motor Trucks

Postmaster General Brown, of the Post Office Department, Washington, has awarded contract to Chevrolet Motor Company, Detroit, Mich., for furnishing the Department with 550 motor trucks, complete, at a bid of \$468.75 each, f.o.b. Flint, Mich. Each truck will consist of a chassis with a gross load carrying capacity of not less than 4200 pounds, equipped with a standard mail truck body of 200 cubic feet capacity, with closed cab. Thirty will be delivered to the post office at St. Louis, Mo., and three each to Dallas, Tex., and Jacksonville, Fla.

Southern Railway Anniversary Excursion

Round trip excursion rates one cent per mile traveled between all points on the Southern Railway System and points on certain participating connecting lines will be sold on June 18 in commemoration of the thirty-eighth anniversary of the organization of the Southern Railway Company. Co-operating with the Southern Railway in the operation of this one cent per mile anniversary excursion, the Pullman Company will sell round trip sleeping car tickets at a reduction of 25 per cent under regular fares to holders of Southern Anniversary Day tickets.

Southern Pine Grading Rules

General revision of grading rules of the Southern Pine Association, New Orleans, soon to be made effective, will include a new matching for Southern Pine flooring. In order to be prepared to take care of orders from Southern Pine manufacturers for new tongue cutters, two leading manufacturers of sawmill machinery have been supplied drawings of the new pattern, according to Association headquarters. Southern Pine manufacturers are urged by the Association to furnish it the names of machinery makers, that drawings may be placed with them, enabling them to be prepared to handle orders for new tongue cutters.

Du Pont Acquires Argentine Firm

The du Pont Company, Wilmington, Del., has acquired a controlling interest in C. G. Bartlett & Company, Ltd., Buenos Aires, who have taken over Borzone & Marengo, manufacturers of carbon bisulphide. This company under the name of E. I. Du Pont de Nemours y Compania Argentina S. A. Commercial e Industrial, with headquarters in Buenos Aires, will carry on the present business of the two firms, the most important activities being the importation and processing of sulphur in various forms and mixtures and the manufacture and sale of carbon bisulphide. It will also act as selling agent for certain du Pont products made in the United States. C. G. Bartlett, who retains a substantial interest, will remain as president and manager of the company.

Trade Literature

Dust Collection.—Catalog 1391, "Positive Dust Collection at Low Cost," has been issued by the Blaw-Knox Company, Pittsburgh, Pa. The publication is devoted to Blaw-Knox dust collectors and other steel products, presenting illustrative and descriptive data, with tables of dimensions and specifications.

Convectofin Heaters.—Bulletin No. 5, issued by the Commodore Heaters Corporation, New York, manufacturers of "Convectofin—The Built-In Heater," presents complete tables for the most popular series and designs of these heaters: Concealed type, flush type, offset type and floor type. Tables give the equivalents in square feet of direct steam radiation. Copies of the bulletin are available on request.

Extra Capacity Trailer.—The Wellman Engineering Co., Cleveland, Ohio, has issued a six-page bulletin devoted to Williams Extra Capacity heavy duty trailer, described as giving extra strength without increased weight. Outstanding features of the machine are: Improved rear end construction; even distribution of trailer load; accessibility and bigger bearings.

Aluminum Uses.—Progress in the use of aluminum for making cars and trucks and numerous household and industrial devices is described as "romantic and spectacular" by Dr. Francis C. Frary, director of research of the Aluminum Company of America, Pittsburgh, in a research narrative issued by the Engineering Foundation, New York.

New Orleans Commerce.—The "Red Book of New Orleans Commerce, Buyers' Guide Membership Directory 1932," has been issued, a classified directory of New Orleans business which lists the products made and sold in New Orleans and the firms making and selling them. It includes also the local importers and exporters, with a roster to date of the membership of the New Orleans Association of Commerce.

Air Filters in Industry.—Under the caption of "American Air Filters in Industry," the American Air Filter Company, Inc., Louisville, Ky., has published a booklet devoted to industrial dust problems and the application of filtered air for solving them. The company was organized in 1929 by the consolidation of seven major air filter companies, three of which were among the oldest and largest manufacturers in this field. It maintains branch offices in important cities throughout the country.

Road Pavers.—The Foote Company, Inc., Nunda, N. Y., among the world's largest exclusive builders of road pavers, has issued an attractive catalog illustrating and describing the Multifoot Paver and stressing its 1932 features, which include greater size, greater speed, 2-speed traction, improved skip hoist, superstructure of entirely new design, transmission stepped up in specifications, improved boom, larger bucket, simplicity and economy of operation. Southern sales representatives of the company are: John C. Louis Co., Baltimore; Burton Franklin, Chattanooga, Tenn.; Browning-Ferris Machine Co., Dallas and Houston, Tex.; Wm. M. Bryant, Fairmont, W. Va.; Bailey-Treen Machine Co., Huntington, W. Va.; Choctaw Culvert & Machine Co., Jackson, Miss.; Memphis, Tenn., and Little Rock, Ark.; Bublitz Equipment Co., Kansas City, Mo.; R. L. Harris, Knoxville, Tenn.; Wilson Machine & Supply Co., Lexington, Ky.; Roy C. Wayne Supply Co., Louisville, Ky.; F. J. Spaulding & Son, Mobile, Ala.; Southern States Machine & Equipment Co., New Orleans, La.; Herd Equipment Co., Oklahoma City, Okla.; Richmond Machine & Equipment Co., Richmond, Va.; Fickelissen-Finney Equipment Co., St. Louis, Mo.; Standard Machine & Equipment Co., Spartanburg, S. C.

Self-Regulation Industry's Need

Price-stabilization, rather than price-fixing, should be the especial concern of all organized trades and industries, according to Charles F. Abbott, executive director of the American Institute of Steel Construction, who addressed the Seventeenth Annual International Convention of the National Association of Purchasing Agents at Detroit on June 7. Price-cutting and bid chiseling are paid for by the laboring man, and these practices have a tendency to check business recovery, he asserted.

Continuing, Mr. Abbott said:

"Relentless, selfish competition has brought our industries to the brink of ruin. That is a strong statement, but this is no longer a time to compromise with soft words.

"Business exists for making profits. When profits disappear, business likewise disappears. The satisfaction of labor working for an adequate wage, of the consuming public for an adequate supply of goods at reasonable prices, of the investor for a return on his money, of the government for an unimpaired source of tax returns, are all dependent uniformly on the profitable operation of business.

"Unequalized production and consumption has kept prices at a level that has created losses for most all our business interests. In the face of this situation there are too many who are still obsessed with an inherent faith in getting all the business in sight as the only solution to their own problems. They believe that it offers the one assurance of continued operation. In such a wild scramble for business, prices and profits have been cast overboard as a few, prompted by selfishness, have created a demoralized condition throughout their industry, and in opposition to stabilization.

"It is difficult for some to accept the idea that operating policies must be based on conditions of sale. They are too frequently formulated by disregarding them entirely. The danger is not entirely a lack of business, but the failure to maintain prices that include a reasonable profit.

"The profit record in most of our basic industries such as oil, coal, lumber, metal, textile, rubber, food and others has been anything but encouraging. We have been dissipating important natural resources at cost, and at a loss. During 1931 the steel industry, that consumes the most valuable of all natural resources, sold approximately 20,000,000 tons of finished steel products and paid \$1.00 per ton for the privilege of doing so. More than \$20,000,000 was lost. Similar large losses were absorbed by other large and important industries. It is a sad story but one that is receiving the attention of those whose interest is adversely affected.

"Destructive competition has brought consumers to the point where they regard low prices as the only consideration in their purchases. Price-cutting has educated buyers to realize that the low

price of today may not be the low price of tomorrow.

"The problem is not so much the cut price as it is the attitude of some of the sellers who are out to get the business at any price. Invariably they cut their own low price, and such a policy incurs economic loss.

"Industry must understand and accept the theory of stabilized production. It must recognize the folly of attempting to operate a plant on a basis of 50 per cent capacity output when statistics indicate but 25 per cent capacity demand. It must overcome that degree of selfishness which induces others to enter into a war of price-cutting in an attempt to keep operating if the business is to endure. It must adopt the formula of total cost plus profit in fixing selling prices. Public welfare is advanced when business is profitable, it suffers when prices are reduced below cost.

"If demoralized price-cutting is to be eliminated, the sellers must exert their leadership, and in the formulation of their selling policies they must define fair practices and then vigorously enforce them without any partiality or deviation. One of the most constructive influences is the establishment of a one price policy, thereby establishing prices and discounts that will be fair to all.

"If our business men would agree to discontinue price-cutting and bid chiseling and to pay fair prices we would hasten the trend of business revival. We should all insist that our purchasing agents recognize the right of all from whom we buy to a fair profit and to discourage purchases at prices that are below a reasonable minimum.

"It is a mistake to think that price-fixing is the ultimate aim of stabilization. American business is volatile and requires greater freedom than would be permitted under any definite plan of price fixing. But that is no indication that we do not require greater stabilization in our marketing plans and I firmly believe that we can attain it effectively.

"Self-help, self-government and self-regulation are what industry needs. It should take the initiative in removing cut-throat competition, uneconomic overproduction, unethical practices and this could all be accomplished through honest cooperation between all members of an industry."

Group of Buildings for University

New Orleans, La.—Moise H. Goldstein, architect, announces that working drawings will shortly be started for a group of educational buildings for the new Dillard Memorial University for negroes. Preliminary plans have been approved, but it will be several months before final plans and specifications will be ready.

Nurses' Home Contract Let

McCormick & Lenham, Philadelphia contractors, have been awarded the contract for erection of a nurses' home and auxiliary improvements at Buena Vista, Md., in Prince George's County, for the Commissioners of the District of Columbia. The firm's bid was \$323,000.

\$8,166,000 Government Building Bids

Washington, D. C.—Low bid on general contract to erect a new building here for the Department of Justice was submitted to the Treasury Department, Jas. A. Wetmore, Acting Supervising Architect, by George A. Fuller Company, Washington, at \$7,600,000. The Washington branch of the Otis Elevator Company, New York, submitted low bid for elevators, at \$566,000. Contract was awarded last fall to S. M. Siesel Company, Pittsburgh, Pa., at \$949,000, for constructing foundations. Plans for the building were prepared by Zantzinger, Borie & Medary, Philadelphia. Isaac Hathaway Francis, also of Philadelphia, is the heating, plumbing and wiring engineer, and Gravel & Duncan Lewis of Washington are structural engineers.

\$2,000,000 Highway Bridge Project to Be Initiated

Baton Rouge, La.—The Louisiana Highway Commission is in a position to proceed with construction of highway bridges over the Atchafalaya river at Krotz Springs and Morgan City, through securing of Federal aid funds, according to announcement by A. P. Tugwell, commission chairman.

Work on the bridges, which will cost an estimated \$2,000,000, was stopped about six months ago because of lack of money resulting from inability of the highway commission to sell satisfactorily sufficient bonds to carry on its construction program.

\$1,000,000 Refinery Improvements

Fort Worth, Tex.—Officials of the Ohio Oil Company, Findlay, Ohio, parent organization of the Marathon Oil Company, have authorized an expenditure of \$1,000,000 for the improvement and expansion of the Fort Worth refinery of the latter company. Improvements will consist largely of remodeling work and installation of new cracking facilities, enabling the plant to obtain greater gasoline recovery per barrel of crude oil, and make possible the processing of high octane gasoline. It is understood the Ohio Oil Company plans similar improvements at the Marathon plant at Bristow, Okla. The Marathon Oil Company is the refining and marketing subsidiary of the Ohio Oil Company, organized when the Transcontinental Oil Company was absorbed.

Low bid to erect the Gitting School, Washington, D. C., was submitted to the District Commissioners by North-Eastern Construction Company, Baltimore, at \$162,261.

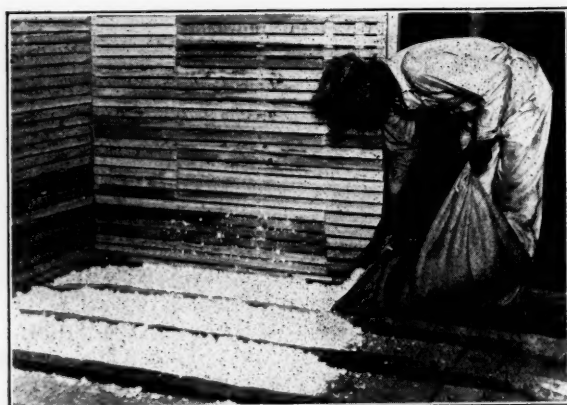
Tensulate for Home Insulation

The Tennessee Products Corporation, Nashville, is manufacturing Tensulate, a mineral wool, at its plant at Rockdale, Tenn.; made from mineral derivatives, it provides protection against heat, cold, sound, vermin, fire and rodents. The product was developed by the research department of the company after two years' work. Present production approximates 30 cars a month, and the company expects this output to be increased soon to meet increasing demand and an expanding market.

For home insulation, major characteristics of the product are its fireproof qualities which considerably reduce fire hazards, and its vermin-proof, rodent-proof and sound-proof qualities, also it provides exceptional protection against

change, since it is made from a mineral substance, and that once in place, it retains its position. It is estimated that a 4-inch layer of Tensulate grade A loose wool or grade A pellet wool will keep in or out as much heat or cold as a brick and mortar wall 52 inches thick, a hardwood wall 20 inches thick, a softwood wall 12 inches, or a composition board wall 8 inches thick.

Loose wool Tensulate weighs approximately 6½ pounds per cubic foot, hand packed, and grade A pellet wool weighs about 8 pounds. One ton of the latter will cover approximately 800 surface feet with a 4-inch layer. In ceiling insulation, Tensulate pellet wool should be poured in place, instructions say, and raked to desired thickness with a board



Installing
Tensulate
in Pellet Form
on Upper Deck
or Attic Floor

cold weather, the company declares. Cost of installation is estimated at 2 or 3 per cent the total cost of the building; further it is stated that, through the use of this insulation, engineers are able to recommend smaller heating plants, partially offsetting the cost of the material, and reducing fuel bills. In summer, house temperatures are frequently reduced 15 to 20 per cent, it is said, fuel costs being cut 25 to 30 per cent in winter. Tensulate may be installed in old homes as well as new.

The product is composed principally of silica, lime, alumina and magnesia, all primary products entering into its manufacture coming from the company's own quarries; coke used in fusing the burden is specially prepared in the company's by-product ovens at Chattanooga. The conversion process creates a material in which it is said 80 to 90 per cent dead air cell space is obtained, which means, theoretically, a well nigh perfect insulating material. When properly installed, it is said that Tensulate will not slack and disintegrate; that it is flexible and pliable; is not subject to chemical

gauged to fit between joists to the proper distance, with no packing necessary. Rightly installed, Tensulate products will not corrode channel iron or structural steel, it is declared, and will not disintegrate, deteriorate, or sift through.

Tensulate is marketed through recognized distributors of insulating materials, aided by offices of the Tennessee Products Corporation in Nashville, New York, New Orleans, Memphis, Chattanooga, Cincinnati and Birmingham. Also, it is distributed through traveling representatives and sales agents.

Economic Council Meeting

The Kentucky Division of the Southeastern Economic Council will hold a one-day session at Louisville, on June 24, in the Kentucky Hotel. Industrial and business leaders have been invited to discuss matters relating to the industrial, social and economic welfare of the state. Representation is especially desired from the following lines: Agricul-

ture, Transportation, Manufacturing, Mining, Power and Light, Telephone, Banking, Insurance, Forestry, Education, Health, Marketing, Distribution, Publicity, Lumber and Woodworking.

Hugh MacRae of Wilmington, N. C., is president of the Council, and J. R. Geib is vice-president for Kentucky. Chas. F. Huhlein is chairman of the state committee on arrangements, at 1390 South First St., Louisville.

Mobile Hospital Enlargement

Mobile, Ala.—Work is progressing on the enlargement of the U. S. Marine Hospital here, according to Algernon Blair, Montgomery, Ala., general contractor, who states that three residences are now being plastered; all concrete work and brick work on nurses' quarters is complete and interior tile partitions are being set in this building; first floor slab on the main building has been poured and brick work is up to the second floor. The entire project, to cost about \$450,000, will embrace the extension and remodeling of the main building, construction of nurses' quarters, officers' residences, boiler house, garage, etc. Warren, Knight & Davis, Birmingham, Ala., and Chandler C. Yonge, Mobile, are the architects, and W. C. Spiker & Co., Atlanta, Ga., engineers. The following sub-contracts have been awarded:

Electrical work—T. D. Little, Montgomery, Ala.

Roofing and sheet metal work—Acme Roofing Company, Montgomery

Tile work and marble setting—Macon Terrazzo Tile Company, Macon, Ga.

Metal base and metal bucks—Builders Specialties Company, Atlanta

Painting—Brown-Rogers Wall Paper & Paint Company, Birmingham

Miscellaneous iron—Mobile Steel Company

Linoleum—L. Hammel Dry Goods Co., Mobile

Kitchen equipment—Teague Hardware Co., Montgomery

Finishing hardware—Russell & Erwin Manufacturing Co., New Britain, Conn.

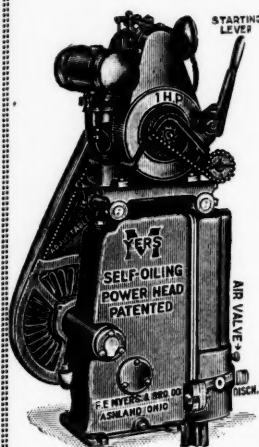
Millwork—McPhillips Manufacturing Co., Mobile

Lath and plaster—Taylor & Forbes, Texarkana, Ark.

\$800,000 College Building Program

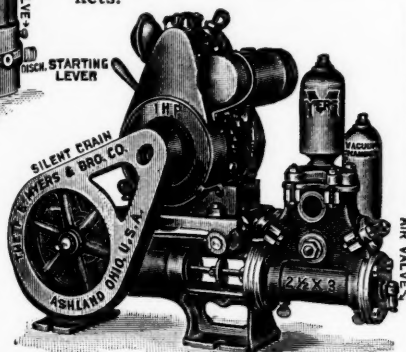
Nashville, Tenn.—President W. J. Hale, of Tennessee Agricultural and Industrial College here, announces gifts of \$325,000 to be applied to the erection of buildings in an \$800,000 expansion program. Of the total, \$200,000 was appropriated by the General Education Board and \$125,000 by the Rosenwald Fund. The remainder of the fund is expected from state appropriation and other sources. Plans are now being prepared for a new Health Building, Administration Building, Practice School and Agricultural building.

MYERS ENGINE DRIVEN POWER PUMPS



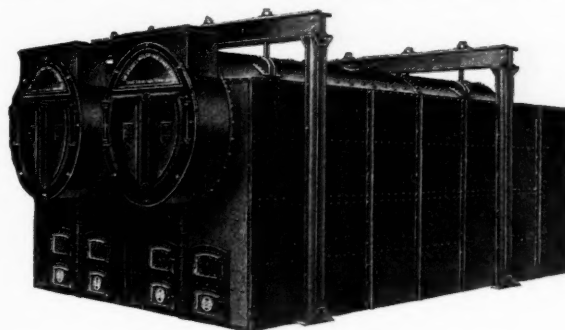
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FINANCIAL NEWS

Bond Issues Proposed

Ark., Fayetteville—Water—J. H. McIlroy, Chmn., Water Improvement District will sell bonds soon.

Fla., Miami—School Refunding—Dade County Special Tax School District No. 5 authorized issuing \$158,000 6% refunding bonds.

Fla., Mulberry—School—Polk County, Special Tax School District No. 13, defeated \$20,000 bonds.

La., Kenner—Waterworks—Comms. of East Jefferson Waterworks Dist. No. 1, M. M. Jones, Sec., R. R. No. 2, Jefferson Highway and Shrewsbury, New Orleans, La., advises bond election for \$500,000 has been postponed to June 28.

Miss., Laurel—Refunding—Board of City Comms., G. L. Lightsey, City Clk. opens bids June 17 for \$11,000 bonds.

N. C., Durham—City, Charles M. Johnson, Dir., Local Government, Sec. City Comsn., opens bids June 14 for \$200,000 refunding bonds.

N. C., Wilmington—Refunding—City authorized issuing \$175,000 bonds.

Tex., Bonham—Road and Bridge—Common School District No. 119, Cottage Bend, Fannin County, authorized issuing \$7000 bonds to purchase right of way on highway No. 5.

Tex., Montague—Montague County defeated \$40,000 right-of-way purchase bonds.

Bond Issues Sold

Md., Annapolis—Bridge—State Board of Public Works, Wm. S. Gordy, Jr., State Comptroller, sold \$1,000,000 4½% bonds to Barr Brothers, New York, at 104.79.

Tex., Lindale—School—Consolidated Independent School District sold \$45,000 bonds to State Board of Education.

Building & Loan Associations

Md., Elkton—Susquehanna Building & Loan Assn., Inc., chartered; Robt. J. McCauley, Sam D. Lofftus.

New Financial Corporations

Ark., Little Rock—Securities Finance Co., 401 Main St., incorporated; Moorhead Wright, 3518 Hillroad.

Fla., Clearwater—First National Bank and People's Bank of Clearwater, merged; to be known as First National Bank.

Md., Baltimore—Nation-Wide Securities Co., 7 E. Redwood St., incorporated; Charles H. Sarolea, 48 Wall St., New York.

Md., Sykesville—National Bank of Sykesville, filed application to organize with \$25,000 capital; Millard H. Weer, Sykesville, correspondent.

Mo., Sedalia—Sedalia Bank and Trust Co., capital \$100,000; John McGrath.

Mo., Sedalia—Sedalia Bank and Trust Co. organized with capital of \$100,000, offices in Sedalia National Bank Bldg.; John McGrath, Pres., and William Courtney, Cashier.

Mo., St. Louis—Clemclara Investment Co., incorporated; Roland M. Homer, 7541 Lovella St.

N. C., Greensboro—United Bank & Trust Co. chartered with capital of \$600,000, of which \$100,000 has been paid in by Frank P. Hobgood, John H. Voehringer, Jr., L. H. Hole, Charles Weil, Frank Leak, J. C. Watkins and E. W. Staples, all Greensboro; actual opening expected about July 1 after required depositors' signatures are obtained; to release \$4,000,000 in deposits of old United Bank & Trust Co. in Greensboro, Burlington, Reidsville and Sanford.

Tex., Mt. Vernon—First National Bank and Merchants and Planters National Bank consolidated with capital of \$100,000.

Tex., San Angelo—First National Loan Co. of San Angelo, chartered; capital \$50,000; Clarence R. Webb, Joseph L. Tweedy.

Class I Railroads' Operation

Total operating revenues of Class 1 Railroads for April amounted to \$267,813,620, compared with \$369,758,801 for the corresponding month last year, according to the Bureau of Railway Economics, Washington. Total operating expenses amounted to \$211,631,359, compared with \$290,663,572; net railway operating income, \$20,621,017, com-

pared with \$39,653,565; operating ratio, 79.02, compared with 78.61, and rate of return on property investment, 1.17 per cent, compared with 2.25 per cent. For four months ended April 30, total operating revenues were \$1,100,453,859, compared with \$1,448,717,001 for the corresponding period in 1931; operating expenses, \$873,883,470, compared with \$1,148,536,643; net railway operating income, \$87,535,374, compared with \$148,186,723; operating ratio, 79.41, compared with 79.28, and rate of return on property investment, 1.27 per cent, compared with 2.14 per cent.

\$1,000,000 Maryland Bridge Bonds

Bridge bonds in the amount of \$1,000,000, the second and final installment of a \$2,000,000 bridge loan authorized at the last session of the Legislature, have been sold by the State of Maryland, John M. Dennis, treasurer, to Barr Brothers, New York, at 104.79. As compared with a price of 96.27 for the state's last offering of \$2,122,000 4¼ per cent construction bonds sold in February, the price for this latest issue of 4¼ per cent bonds is an increase of 8.52, thus demonstrating the high credit rating of the state. The bonds will mature serially from 1935 to 1947.

Virginia Bankers to Meet

A program of unusual interest is anticipated for the thirty-ninth annual convention of the Virginia Bankers' Association to be held at Old Point Comfort June 23 to 25. Speakers on the three-day program include George B. Elliott, president of the Atlantic Coast Line Railroad; W. Moncure Gravall, president of the Bank of Crewe; Dr. Douglas S. Freeman, Richmond, and George Munsick, New York. Officers for the new year will be nominated at the second day's session and elections and installations will be held at the conclusion of the program on the last day. Present officers of the Association are: W. S. Irby, president of the Bank of Lunenburg, president; S. W. Keys, cashier of the Bank of Glade Spring, vice-president; Miss Lillian Kendall, of the First and Merchants National Bank, Richmond, assistant secretary; T. D. Neal, of Scott & Stringfellow, Richmond, treasurer, and Thomas W. Ozlin, Kenbridge, attorney.

\$1,300,000 Virginia Road Work

Richmond, Va.—Early construction of road and bridge projects to cost upward of \$1,300,000 has been authorized by Henry G. Shirley, state highway commissioner, and contracts will be awarded as soon as practicable. These projects will include the commission's allocations for the fiscal year beginning July 1.

\$1,887,000 Road Contracts

Austin, Tex.—Road and bridge contracts involving a total of more than \$1,887,000 were awarded here in a two-day session of the Texas Highway Commission. Proposed work covers 122 miles of grade and drainage construction, 56.5 miles of concrete paving, 68 miles of various types of surface treatment and 15 bridges.

Freight Line Buys Boats

Negotiations have been closed by Western Shore Freight Line, Inc., which recently inaugurated a freight service between Baltimore and Rappahannock River points, for the purchase of two steamers of the defunct Baltimore and Virginia Line which abandoned the service several months ago, according to Olin O. Ellis, treasurer of Western Shore Freight Line. The boats—the Potomac and the Virginia—were acquired from the American Contract and Trust Company, Philadelphia, Pa., to which eight vessels of the Baltimore and Virginia Line were recently transferred. In addition to freight space, the vessels also provide passenger accommodations.

Lumber Manufacturers Elect

At the annual meeting in Chicago of the National Lumber Manufacturers Association, the following officers were elected: John W. Blodgett, Grand Rapids, Mich., president; W. M. Ritter, Columbus, Ohio, vice-president and treasurer; Laird Bell, Chicago, second vice-president, and Wilson Compton, Washington, D. C., secretary and manager.

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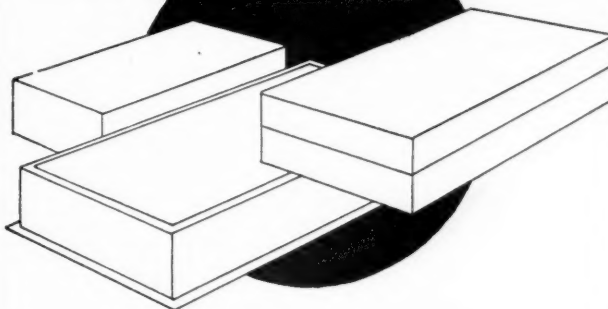
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BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



PROPOSALS

Bids close July 11, 1932.

U. S. Engineer Office, 300 Custom House, Baltimore, Md. Sealed proposals will be received here until 2:00 P. M., Eastern Standard Time, July 11, 1932, and then publicly opened, for dredging in the Cutoff Section of Channel leading to Baltimore, material estimated to measure approximately 953,000 cubic yards, scow measure.

Bids close June 21, 1932.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., June 3, 1932.—**SEALED BIDS**, in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., June 21, 1932, for furnishing all labor and materials and performing all work for the construction of condensing water supply and discharge systems for air conditioning buildings in triangle group, at Washington, D. C. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding six sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$50.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close July 1, 1932.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., June 4, 1932.—**SEALED BIDS**, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., July 1, 1932, for furnishing all labor and materials and performing all work for the construction of the U. S. post office at Grove City, Pa. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not to exceed 3 sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. One set will be furnished builders' exchanges, chambers of commerce or other organizations who will guarantee to make them available for any sub-contractor or material firm interested, and to quantity surveyors, provided a deposit of \$15.00 is made to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close July 8, 1932.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., June 3, 1932.—**SEALED BIDS** in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., July 8, 1932, for furnishing all labor and materials and performing all work for the construction (except elevators and dumb-waiters) of the U. S. post office at Rochester, N. Y. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding six sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$50.00 is made for each set to assure its prompt return. One set will be furnished builders' exchanges, chambers of commerce or other organizations who will guarantee to make them available for any subcontractor or material firm interested, and to quantity surveyors, provided a deposit of \$50.00 is made to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 30, 1932.

OFFICE OF THE CONSTRUCTING QUARTERMASTER, Fort Benning, Georgia. Sealed bids in triplicate, for the construction of Seven (7) Non-commissioned Officers' Quarters and Eighty-eight (88) Garages at this station, will be received at this office until 10 A. M., June 30, 1932, and then publicly opened. The Government reserves the right to accept or reject any or all bids.

Bids close June 28, 1932.

U. S. Engineer Office, Montgomery, Ala. Sealed bids, in quadruplicate, will be received until 2:00 P. M., June 28, 1932, and then publicly opened, for furnishing all labor and materials and performing all work, for dredging Pensacola-Mobile Intracoastal Waterway from the mouth of Portage Creek, Ala., to the 11-foot hydrographic contour in Bon Secours Bay, Ala.; and the shoal area at the Pensacola Bay entrance to Big Lagoon, Fla., comprising 5,336,000 cubic yards, place measurement.

Bids close June 24, 1932.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., June 9, 1932.—**SEALED BIDS**, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., June 24, 1932, for furnishing all labor and materials and performing all work for the remodeling and enlarging (for judges' quarters) of the U. S. post office and court house at Harrisonburg, Va. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding one set, may be obtained by any satisfactory general contractor at this office in the discretion of the supervising architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 17, 1932.

TREASURY DEPARTMENT, office of the supervising architect, Washington, D. C., June 2, 1932.—**SEALED BIDS** in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., June 17, 1932, for furnishing all labor and materials and performing all work for the remodeling and enlarging of the U. S. post office at Kingston, N. Y. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding one set, may be obtained by any satisfactory general contractor at this office in the discretion of the supervising architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close July 8, 1932.

TREASURY DEPARTMENT, office of the supervising architect, Washington, D. C., June 10, 1932.—**SEALED BIDS**, in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., July 8, 1932, for furnishing all labor and materials and performing all work for construction of the U. S. post office at Dansville, N. Y. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three (3) sets, may be obtained at this office, in the discretion of the supervising architect, by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. One set will be furnished builders' exchanges, chambers of commerce or other organizations who will guarantee to make them available for any subcontractor or material firm interested, and to quantity surveyors, provided a deposit of \$15.00 is made to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 24, 1932.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., May 27, 1932.—**SEALED BIDS**, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m. June 24, 1932, for furnishing all labor and materials and performing all work for the construction of the U. S. p. o., etc., at Mount Airy, N. C. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. One set will be furnished builders' exchanges, chambers of commerce or other organizations who will guarantee to make them available for any sub-contractor or material firm interested, and to quantity surveyors, provided a deposit of \$15.00 is made to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close July 12, 1932.

Sealed bids, in triplicate, subject to the conditions contained herein, will be received by the Veterans Administration, Room 764, Arlington Building, Washington, D. C., until 2:30 P. M., July 12, 1932, and then publicly opened, for furnishing all labor and materials and performing all work required for constructing and finishing complete at Veterans Administration Hospital, Batavia, New York, Buildings and Utilities. This work will include excavating, roads, walks, grading and drainage, reinforced concrete, hollow tile, brick work, cut stone, architectural terra cotta, slate stair treads, marble work, terrazzo, floor and wall tile, rubber tile, compressed asphalt tile and linoleum floors, iron work, structural steel construction, flagpole, steel sash, steel stairs, steel shelving, cabinets and partitions, shingle tile, slate, metal and built-up roofing, lightning conductors, skylights, roof ventilators, metal lathing, plastering, sound deadening, carpentry, metal weatherstrips, insect screens, platform scales, dumbwaiter, painting, glazing, hardware, plumbing, steel water tank and tower, refrigerating and ice making plant, zeolite water softening system, radial brick chimney, incinerator, heating and ventilating, electrical work, electric elevators and outside distribution systems, and such other items as shown or specified. Separate bids will be received for (a) General Construction, including Radial Brick Chimney and Incinerator; (b) Plumbing, Heating, Electrical Work; (c) Electric Elevators; (d) Steel Water Tank and Tower; (e) Refrigerating and Ice Making Plant; and (f) Zeolite Water Softening System; all as set forth on bid form. Bids will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract and, in making awards, the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. At the discretion of the Administrator, drawings and specifications may be obtained upon application in writing to the Construction Service, Room 764, Arlington Building, Washington, D. C. While no deposit will be necessary, return of the drawings and specifications within ten days after date of opening bids will be required. In case no bid is to be submitted, the return of plans and specifications, as soon as this fact has been determined and before the date for opening bids, is requested. Compliance with the requirement and with the request indicated will be considered in connection with future applications for drawings and specifications. George E. Ijams, Assistant Administrator.

Bids close June 28, 1932.

Roads and Bridges

Richmond, Va.
Sealed bids will be received 10 A. M., Tuesday, June 28, 1932, Virginia Dept. of Highways, Richmond, Va., for the construction of:
Proj. 366, 0.6 mi., soil, 3457 cu. yd. excav., 2203 cu. yd. surfacing.
Proj. 412 & 528, 22 mi., local gravel, 10,000 cu. yd. excav., 72,600 cu. yd. surfacing.
Proj. 518, 6.3 mi., local gravel, 118,707 cu. yd. excav., 20,815 cu. yd. surfacing.
Proj. 562, 4 mi., macadam, 30,023 cu. yd. excav., 65,934 sq. yd. surfacing.
Proj. 600, 2.7 mi., macadam, 20,000 cu. yd. excav., 32,566 sq. yd. surfacing.
Proj. 668, 0.5 mi., concrete, 1406 cu. yd. excav., 4489 sq. yd. surfacing.
Proj. 675, 8.7 mi., macadam, 64,174 cu. yd. excav., 143,967 sq. yd. surfacing.
Proj. 699, 12 mi., Gr. & Dr., 272,370 cu. yd. excav.
Proj. 707, 3.4 mi., gravel, 20,665 cu. yd. excav., 11,132 sq. yd. surfacing.
Proj. 735, 1.3 mi., soil, 12,663 cu. yd. excav., 4190 sq. yd. surfacing.
BRIDGES
Proj. 448B1, length 156'6", 29,300 lbs. steel, 123,500 str. steel, 207.3 conc., 630T (900 UN. T) piles.
Proj. 448B2, length 42'6", 191.2 conc. 1980 T. piles.
Proj. 479B, length 90', 12,045 lbs. steel, 97,000 str. steel, 495.9 conc.
Proj. 637, length 66', 18,625 lbs. steel, 274.6 conc.
Details obtainable upon request.

Bids close June 28, 1932.

Delaware Highway Work

Dover, Del.
Sealed proposals will be received by the State Highway Department at its office, Dover, Del., until 2:00 o'clock P. M., Eastern Standard Time, June 28, 1932, and at that place and time publicly opened, for contracts involving the following approximate quantities:

CONTRACT 41-B
WIDENING CENTRAL AVE. MARKET TO SECOND ST. LAUREL—200 FT.
60 Cu. Yds. Excavation.
60 Cu. Yds. Concrete Pavement.
50 Lin. Ft. Expansion Joint.

CONTRACT 42-D
FRONT ST., SEAFORD, WIDENING 3000 FT.
1000 Cu. Yds. Excavation.

1000 Cu. Yds. Concrete Pavement.
600 Lin. Ft. Expansion Joint.

CONTRACT 253 DRIVEWAYS, BRANDYWINE SANITARIUM

1000 Cu. Yds. Excavation.
1000 Tons Stone Base Course.
400 Tons Conc. Surface Course.
10 Cu. Yds. Class A Concrete.
1500 Lbs. Catch Basin.
90 Lin. Ft. 15-in. R. C. Pipe.
90 Lin. Ft. 18-in. R. C. Pipe.
500 Sq. Yds. Class A Conc. Gutter.

CONTRACT 254 TUB MILL—THOMPSONVILLE. SLAG SURFACING, 7.3 MI.

7.3 Miles Grading.
2000 Cu. Yds. Borrow.
3200 Tons Slag Base Course.
300 Lin. Ft. 15-in. C. M. Pipe.
70 Lin. Ft. 15-in. R. C. Pipe.
180 Lin. Ft. 18-in. R. C. Pipe.
36 Lin. Ft. 24-in. R. C. Pipe.
36 Lin. Ft. 30-in. R. C. Pipe.
Above and subsequent contracts will be governed by the 1932 Specifications.
Performance of contract shall commence within ten (10) days after execution of the contract and be completed as specified.
All labor employed on these contracts shall be legal residents of the State of Delaware, and special provisions for use of machinery is provided in each proposal.
Monthly payments will be made for 90 per cent of the construction completed each month.
Bidders must submit proposals upon forms provided by the Department.
Each proposal must be accompanied by a surety bond, certified check or money to the amount of at least ten (10) per centum of the total amount of the proposal.
The envelope containing the proposal must be marked "Proposal for the construction of State Highway Contract No. . . ."
The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.
The right is reserved to reject any or all bids.
Complete sets of plans and specifications may be obtained after June 17, 1932, upon receipt of two dollars (\$2.00) for each contract, which amount will not be refunded.
STATE HIGHWAY DEPARTMENT.

Bids close June 21, 1932.

Maryland Highway Work

DEPARTMENT OF PUBLIC WORKS
STATE OF MARYLAND
STATE ROADS COMMISSION

NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for building three sections of State Highway as follows:
Baltimore County, Contract No. B-184-411
—One section of State Highway along the Joppa Road from the Harford Road at Carney to Towson for a distance of 4.39 miles (Concrete Shoulders)
Baltimore County, Contract No. B-252-42
—One section of State Highway along the Stringtown Road from the end of Contract B-213 to the Yeoho Road for a distance of 0.76 mile (Macadam)
Washington County, Contract No. W-110-611—Federal Aid Project No. 258—One section of State Highway along the Middleburg Pike from Hagerstown to the Pennsylvania State Line for a distance of 3.83 miles (Concrete Shoulders)

will be received by the State Roads Commission at its offices, Federal Reserve Bank Building, Calvert and Lexington Streets, Baltimore, Maryland, until 12 M. on the 21st day of June, 1932, at which time and place they will be publicly opened and read.
PREQUALIFICATION OF BIDDERS REQUIRED.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1.00 for each separate project, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check, payable to the State Roads Commission of Maryland, as required by Sec. 6, Chapter 539, Acts of 1931, of the amount as set forth in the proposal form.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 7th day of June, 1932.

G. CLINTON UHL, Chairman.
L. H. STEUART, Secretary.

CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

TIMBER AND TIMBER LAND

RECEIVER MUST SELL virgin Forked Leaf white oak timber tract: near railroad southeast Tennessee. Address No. 9192, care Manufacturers Record, Baltimore, Md.

FARM, FRUIT AND TRUCK LANDS

VIRGINIA

710 ACRE stock, grain, truck farm, 7 room dwelling, tenant house, barns, stables; 350 ready cultivation pasture, all fenced. Low price, liberal terms; fine location. Other Virginia farms. Write your wants. MORTON G. THALHIMER, INC., Richmond, Va.

BUSINESS OPPORTUNITIES

POSITION OPEN—Estimator on sewer, water and misc. construction. Investment \$5000 to \$10,000 required, which will purchase substantial interest in established company located Virginia. Open to investigation. No. 9191, care Manufacturers Record.

WE WILL SAVE YOU 40% on construction of your ice and cold storage plant. Many plants designed by us are producing ice under \$2.00 per ton and our cold storage plants eliminate Sunday and night running of compressors. Inquiries solicited. Mayer Construction Co., 3850 Lansdowne Ave., Cincinnati, Ohio.

Rates, Terms and Conditions

RATES: 30 cents a line each insertion. Minimum space accepted, four lines. In estimating the cost allow six or seven words of ordinary length to line. When the advertisement contains a number of long words proper allowance should be made.

Rates for Special Contract:
100 lines 28c a line
300 lines 26c a line
500 lines or more 25c a line.

TERMS: For transient advertising cash with order; check, post office or express money order or stamps accepted.

On special contract advertising bills are rendered monthly, covering space used each month, payable within ten days.

CONDITIONS: No patent medicine, oil or mining stock advertisements or questionable or undesirable advertisements will be accepted. The assistance of our readers in excluding undesirable advertisements is requested. No display type used.

SOUTHERN ESTATE

FOR SALE—A beautiful Florida Water-front Estate near Ringling Museum of Art, at a fraction of value. Details on request. Shown by appointment. Address No. 9189, care of Manufacturers Record, Baltimore.

WAREHOUSE SPACE

WAREHOUSE SPACE FOR RENT—Side track available—cost directly in proportion to space used. HORACE K. HOUSTON, Box 2701, Memphis, Tennessee.

INDUSTRIAL PLANTS

COTTON MILL For Sale

8500 Spindles
260 Looms
360 H.P. New Diesel Engine
Brick Buildings
Good Tenant Houses
Good Labor Conditions

Exceedingly cheap—Good terms
Low Taxes

For further information write No. 9188, care Manufacturers Record, Baltimore, Md.

PATENT ATTORNEYS

E. H. PURDY
Registered Patent Attorney
Reasonable Charges
1004 Lexington Bldg., Baltimore, Md.

FREE "PATENT PARTICULARS"
Sterling Buck, over 25 years Registered Patent Attorney. Prompt and thorough services. Suite M 629 F. Washington, D. C.

PATENTS—Booklet free. Highest references. Best results. Promptness assured. WATSON E. COLEMAN, Patent Lawyer, 724 Ninth St., N. W., Washington, D. C.

PATENT ATTORNEYS

PAUL B. EATON, Patent Attorney
1408-R Johnston Bldg., Charlotte, N. C.
434 Munsey Building, Washington, D. C.
417 Wachovia Bldg., Winston-Salem, N. C.

SEYMOUR & BRIGHT, Registered Patent Attorneys. Established 1876. PATENTS, TRADEMARKS, COPYRIGHTS. Prompt and thorough service. Suite 892, National Press Building, Washington, D. C.

MEN WANTED

IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements, your identity covered and present position protected. Established twenty-two years. Send only name and address for details.

R. W. BIXBY, INC.,
103 Downtown Bldg. Buffalo, New York

SITUATIONS WANTED

WANTED POSITION by married man, 31 years of age, 10 years experience real estate salesman. Would like to represent large manufacturer in Nashville and middle Tennessee. References Merchants and Bankers as to character and ability. Address P. O. Box 358, Nashville, Tennessee.

MACHINERY AND SUPPLIES

LEADITE, 7500 pounds

all or part.

Write for prices.

CAMPEN SALVAGE CO.,

Pratt and Sharp Streets, Baltimore, Md.

18"x8' Monarch Lathe.....\$200.00
24"x12' Atlas Lathe, quick change... 450.00
No. 2 Heavy Ohio Universal Miller.
Complete equipment. Excellent... 550.00
24" Cincinnati B. G. Crank Shaper... 500.00
All sizes Welding Machines; Air Compressors, Generators, etc. Send for our catalog. Terms to suit.

CINCINNATI MACHINERY & SUPPLY CO.
25 West Second St., Cincinnati, O.

MACHINERY AND SUPPLIES

FOR SALE

Complete paving outfit, including
Two—Cummer Asphalt Plants.
Four—Rollers.
One—Koehring Paver.
Two—Small Mixers.
One—Sand Drier.
One—Ingersoll Rand Portable Compressor.
Two—Farquhar Boilers, 100 h.p., 60 h.p.
One—Domestic Triplex Road Pump.
One—3000 W. Kohler Light Plant.
Tanks, Pumps, Engines, Road Machine Tools. All cleaned, painted, repaired and in good working condition. For quick sale \$6000.00 cash. Communicate P. O. Box 94, Charlotte, N. C.

MACHINERY AND SUPPLIES WANTED

WANTED: a large amount of No. 4" and 6" either galvanized or cast iron water pipes, second hand. Please give price and amount for sale in first letter.

RALPH U. GREEN,
244 S. Beach St., Daytona Beach, Fla.



RESALE DEPARTMENT

MACHINERY

EQUIPMENT

SUPPLIES



NEW AND USED

PIPE

NEW THREADS AND COUPLINGS
GREENPOINT IRON & PIPE CO. Inc.

187-207 Maspeth Ave., Brooklyn, N. Y.

RECONDITIONED PIPE

Large stock of RECONDITIONED pipe, new threads and couplings, from 3/4" to 24" guaranteed suitable for all practical purposes.

Marine Metal & Supply Co.

167 South Street New York City



Large quantity new and used Government material in excellent condition, ready for immediate shipment. Low prices.

CENTRAL PIPE & SUPPLY CO.
Box 1099 Charleston, W. Va.

NEW · USED · UNTESTED



ALBERT & DAVIDSON PIPE CORP.
2ND AVE. 50TH-51ST ST. BROOKLYN, N.Y.

NEW-USED RECLAIMED FROM 1877
Cut to Sketch and Stocked
ALBERT PIPE SUPPLY CO. Inc.
Berry and North 13th St. Brooklyn, New York

PICK OUT A BARGAIN FROM THESE—YOU CAN'T BEAT 'EM

A brand new 1 1/2 yd. heavy duty steam shovel with 22' boom and 16' handle at a used shovel price.

Osgood Conqueror 1 1/4 yd. gas shovel with 20' boom 15' handle and six cylinder engine. A sacrifice.

Osgood Commander clamshell with 40' boom and 3/4 yd. bucket. You can't beat it.

Many others, all sizes, both gas and steam. Tell us what you need.

THE OSGOOD COMPANY

1304 CHENEY AVENUE
MARION, OHIO

—TRANSFORMERS—

SALES AND REPAIR SERVICE

Quick Delivery and Low Prices



A complete stock of transformers 1 to 1000 kva. Modern methods make our repair service second to none. Special service on breakdown jobs.

All transformers guaranteed for one year
Write for Catalog No. 126-E.

The Electric Service Company, Inc.

"America's Used Transformer Clearing House"

Mariemont Ave. and Trade St., Mariemont, Cincinnati, O.



Double Spindle Lathe

38"-60"x32" McCabe 2-in-1 engine lathe, belt drive, geared face plate, chuck jaws, taper attachment, 25 ft. centers, excellent condition, sacrifice price \$2,000.00.

THE O'BRIEN MACHINERY CO.

113 N. Third St. Philadelphia, Pa.

PIPE TUBES — TUBING

For All Purposes

McDOWELL PIPE CORP.

309 SCHOLES ST., BROOKLYN, N. Y.

36" PORTABLE TRACK

25 lb. rails—7 steel ties per 15 ft. sections. Over ten miles, located Ocala, Fla. Also locomotives, cars, cranes and shovels.

Write us or have your local dealer do so.
EQUIPMENT CORPORATION OF AMERICA
1166 So. Washtenaw Ave., Chicago

U. S. GOVERNMENT SURPLUS AND SALVAGE MATERIALS

All steel 14" wide gravity conveyor rollers, ball bearing.

Chain falls, 1 to 5 ton capacity.

NATS SALVAGE COMPANY

128 W. Pratt St., Baltimore, Md.

308 H.P. HEINE BOILERS

Two (2) 308 H.P. Heine Water Tube Boilers 200 pounds steam pressure as good as new must be sold at once. Price extremely low.

N. BLOCK & COMPANY
NORFOLK, VA.

If you want to get
SOUTHERN business
advertise in the
MANUFACTURERS RECORD
BALTIMORE, MD.

PERFORATED METALS HEADQUARTERS
Cotton Seed Oil Works a Specialty
Send for Samples
ERDLE PERFORATING CO. Rochester, N. Y.

MANHATTAN
PERFORATED METAL CO., INC.
43 17-37th Street, Long Island City, N. Y.
PERFORATORS
of All Kinds of Metals for All Industries
Write for Copper, Brass, Tin, Zinc or
Aluminum Catalog

No. 1
No. 3
No. 7
No. 22

PERFORATED SCREEN PLATES AND SHEETS

ORES	for	CEMENT
COAL	Cotton-Seed Oil Mills,	SAND
STONE	Cotton Gins, Phosphate Mines,	CLAY
GRAVEL	Fertilizer Plants, Cyanide	ETC.
	Works, Chemical Works.	

Write for catalogue
CHARLES MUNDT & SONS
490 JOHNSTON AVENUE, JERSEY CITY, N. J.


IF YOU WANT TO GET—
Southern Business
Advertise in the
MANUFACTURERS RECORD

STALE GAS IS FEEBLE!
Fresh Gas Packs Power

As gasoline grows older, gasoline grows weaker. As staleness increases—power decreases. Stale gas becomes stickier, too—has a greater tendency to foul valves and carbureter. And is more apt to knock.

During the past several years, Gulf has developed a refining and distributing system that assures the motorists of getting FRESH gasoline.

Get all the power you pay for.

GET FRESH GASOLINE GET 
GULF REFINING COMPANY

10th
SOUTHERN TEXTILE EXPOSITION
Textile Hall Greenville, South Carolina
October 17 to 22 inclusive

Modern competition in textile manufacturing demands the most improved machinery and accessories, and the best grades of supplies. Through their use production costs are lowered and profits increased.

In Textile Hall, October 17 to 22, there will be in operation latest types of machinery used in cotton, silk, rayon, and wool mills, and in dyeing, bleaching and finishing plants.

Visitors to the Southern Textile Exposition will come from every southern state.

Complimentary passes will be sent by us to presidents, treasurers, superintendents, and department heads. Exhibitors will distribute thousands of complimentary tickets to operatives. Special railroad rates and Pullman car service have been granted by the railroads. All textile executives and operatives are cordially invited to attend.

Textile Hall Corporation, Greenville, S. C.

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Carborundum Co., Niagara Falls, N. Y.

ACCOUNTANTS and AUDITORS

Andrews, Harden & Co., Birmingham, Ala.

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De Laval Steam Turbine Co., Trenton, N.J.
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AIR HEATERS.

Babcock & Wilcox Co., New York.

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Chase, Wm. J. J., Atlanta.
Moyer Co., Tilghman, Allentown, Pa.

ARCHITECTS' SUPPLIES.

Weber Co., Inc., F., Philadelphia, Pa.

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Gulf Refining Co., Pittsburgh, Pa.

—Filler.

American Limestone Co., Knoxville, Tenn.

—Paving.

Barber Asphalt Co., Philadelphia, Pa.

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American Limestone Co., Knoxville, Tenn.

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Baltimore Commercial Bank, Balto., Md.
Baltimore Trust Co., Baltimore, Md.
Bank of New York & Trust Co., New York City.
First and Merchants National Bank, Richmond, Va.

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American Bridge Co., Pittsburgh, Pa.
McClintic-Marshall Corp., Bethlehem, Pa.

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Sweet's Steel Corp., Williamsport, Pa.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
Virginia Bridge & Iron Co., Roanoke, Va.

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Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
Virginia Bridge & Iron Co., Roanoke, Va.

BILLETS (Basic Open Hearth.)

Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

BLASTING POWDER and Accessories.

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Wilson Corp., The J. G., New York.

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BOILERS (New.)

Babcock & Wilcox Co., The, New York.
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Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Cole Mfg. Co., R. D., Newman, Ga.
Hedges Walsh Weldner Co., Chattanooga, Tenn.
Schodfield's Sons Co., J. S., Macon, Ga.
Titusville Iron Works Co., Titusville, Pa.

—(Oil.)

Babcock & Wilcox Co., New York.

—(Used.)

Delta Equipment Co., Philadelphia, Pa.
O'Brien Machinery Co., Philadelphia, Pa.

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Brooks-Fisher Co., Atlanta, Ga.

—Tubes.

Babcock & Wilcox Co., New York.

National Tube Co., Pittsburgh, Pa.

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Bethlehem Steel Co., Bethlehem, Pa.
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Virginia Bridge & Iron Co., Roanoke, Va.

—Bolts (Track.)

Sweet's Steel Co., Williamsport, Pa.

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Kennedy-Riegler Drilling Co., New York.
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Old Dominion Box Co., Lynchburg, Va.

BRICK (Common Building.)

Friend & Co., Inc., Petersburg, Va.

—(Vitrified, Paving.)

National Paving Brick Assn., Washington, D. C.

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Steele & Sons, J. C., Statesville, N. C.

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BRIDGE SLABS.

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Atlantic Crossed Wks., Norfolk, Va.

Ayer & Lord Tie Co., Chicago, Ill.

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Belmont Iron Works, Philadelphia, Pa.

Bristol Steel & Iron Works, Inc., Bristol, Va.

McClintic-Marshall Corp., Bethlehem, Pa.

Roanoke Iron & Bridge Wks., Roanoke, Va.

Virginia Bridge & Iron Co., Roanoke, Va.

BRONZE (Architectural.)

Heath Company, J. S., Waukegan, Ill.

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Bundle-Spence Mfg. Co., Milwaukee, Wis.

BUCKETS (Clam Shell.)

Owen Bucket Co., Cleveland, Ohio.

Wellman Engr. Co., Cleveland, O.

—(Coal.)

Owen Bucket Co., Cleveland, Ohio.

Wellman Engr. Co., Cleveland, O.

—(Dredging, Excavating, Sewer, etc.)

Owen Bucket Co., Cleveland, Ohio.

Wellman Engr. Co., Cleveland, O.

—(Material Handling.)

Owen Bucket Co., Cleveland, Ohio.

Wellman Engr. Co., Cleveland, O.

—(Ore Handling.)

Owen Bucket Co., Cleveland, Ohio.

Wellman Engr. Co., Cleveland, O.

—(Rehandling.)

Owen Bucket Co., Cleveland, Ohio.

Wellman Engr. Co., Cleveland, O.

—(Sand and Gravel.)

Owen Bucket Co., Cleveland, Ohio.

Wellman Engr. Co., Cleveland, O.

BUILDERS and Contractors.

Moyer Co., Tilghman, Allentown, Pa.

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(Finished.)

Gardner Bros., Salisbury, N. C.

North Carolina Granite Corp., The, Mount Airy, N. C.

BUILDINGS (Industrial.)

McClintic-Marshall Corp., Bethlehem, Pa.

Virginia Bridge & Iron Co., Roanoke, Va.

BULKHEADS.

Shore-Line Builders, Inc., Jacksonville, Fla.

BURLAP.

Fulton Bag & Cotton Mills, Atlanta, Ga.

CABLE.

American Cable Co., New York, N. Y.

—(Elevator.)

American Steel & Wire Co., Chicago, Ill.

Boehling's Sons Co., John A., Trenton, N. J.

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American Steel & Wire Co., Balto., Md.

Boehling's Sons Co., John A., Trenton, N. J.

Western Electric Co., New York, N. Y.

CALCIUM CHLORIDE.

Grasselli Chemical Co., Inc., Birmingham.

CANNING MACHINERY.

Robins & Co., A. K., Baltimore, Md.

CANVAS.

Fulton Bag & Cotton Mills, Atlanta, Ga.

CARS (Dump, Industrial, Logging and Mine.)

Southern Iron & Equipment Co., Atlanta.

CASSIONS (Foundations, Water Wells, etc.)

United Welding Co., Middletown, O.

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Cincinnati Steel Castings Co., Cincinnati, Ohio.

—(Brass, Bronze and Aluminum.)

Richmond Foundry & Mfg. Co., Richmond, Va.

—(Chilled Iron.)

Fuller Lehigh Co., Fullerton, Penna.

—(Gray Iron.)

Fuller Lehigh Co., Fullerton, Penna.

Glamorgan Pipe & Fdy. Co., Lynchburg, Va.

Jefferson Foundry Co., Birmingham, Ala.

Richmond Foundry & Mfg. Co., Richmond, Va.

Salem Fdry. & Mch. Wks., Salem, Va.

Schofield's Sons Co., J. S., Macon, Ga.

—(Semi-Steel.)

Jefferson Foundry Co., Birmingham, Ala.

Salem Fdry. & Mch. Wks., Salem, Va.

—(Steel.)

Bethlehem Steel Co., Bethlehem, Pa.

Cincinnati Steel Castings Co., Cincinnati, Ohio.

Crucible Steel Casting Co., Landsdowne, Delaware Co., Pa.

Lunkenheimer Co., Cincinnati, Ohio.

CEMENT (Portland.)

Alpha Portland Cement Corp., Birmingham, Ala.

CHAIRS (Opera and Theatre.)

Andrews Co., A. H., Chicago, Ill.

CHEMICALS.

Grasselli Chemical Co., Inc., Birmingham.

CHEMISTS, CHEMICAL ENGINEERS (Analytical.)

Froehling & Robertson, Inc., Richmond, Va.

Hunt Co., Robert W., Chicago, Ill.

Picard Laboratories, Birmingham, Ala.

Pittsburgh Testing Laboratories, Pittsburgh, Pa.

CHIMNEYS (Concrete.)

Rust Engineering Co., Birmingham, Ala.

—(Radial Brick.)

Rust Engineering Co., Birmingham, Ala.

CHUTES (Mail.)

Cutler Mail Chute Co., Rochester, N. Y.

CIRCUIT BREAKERS.

Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

CLUTCHES (Friction.)

Cludwell Co., Inc., W. E., Louisville, Ky.

COAL (Bituminous.)

Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

COAL and Ash-Handling Mch.

Shepard Niles Crane & Hoist Corp., Montour Falls, N. Y.

—Tipples.

American Bridge Co., Pittsburgh, Pa.

Virginia Bridge & Iron Co., Roanoke, Va.

COKE.

Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

CONCRETE Construction (Reinforced.)

Rust Engineering Co., Birmingham, Ala.

CONCRETE MIXERS.

Dunning & Beechert Press Co., Inc., Syracuse, N. Y.

Jaeger Machine Co., Columbus, Ohio.

CONDENSERS.

Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

CONDUITS (Electric, Interior, Steel.)

Western Electric Co., New York, N. Y.

CONTRACTORS (Bridge.)

Hardaway Contracting Co., Columbus, Ga.

Snare Corp., Frederick, New York, N. Y.

—(Drainage and Dredging.)

Arundel Corp., The, Baltimore, Md.

Atlantic Gulf and Pacific Co., New York.

—Drilling.

Kennedy-Riegler Drilling Co., New York City.

Mott Core Drilling Co., Huntington, W. Va.

Pennsylvania Drilling Co., Pittsburgh, Pa.

Sprague & Henwood, Inc., Scranton, Pa.

—(Electrical.)

Walker Electrical Co., Atlanta, Ga.

Warner Service Co., Knoxville, Tenn.

Webb Electric Co., Anderson, S. C.

—(Foundations and Dams.)

Snare Corp., Frederick, New York, N. Y.

CONTRACTORS (General.)

Blair, Algonon, Montgomery, Ala.

Burkes, Inc., J. V. & R. T., New Orleans.

Cornell Young Co., Inc., Macon, Ga.

Fiske-Carter Constr. Co., Greenville, S. C.

White Engineering Corp., J. G., New York.

—(Industrial Buildings.)

Blair, Algonon, Montgomery, Ala.

Fiske-Carter Constr. Co., Greenville, S. C.

Lockwood Greene Engrs., Inc., Boston.

—(Marble.)

Thrower Marble & Tile Co., Charlotte, N. C.

—(Power Piping.)

Pittsburgh Piping & Equip. Co., Pittsburgh, Pa.

—(Railroad.)

Cornell-Young Co., Inc., Macon, Ga.

—(Reinforced Concrete.)

Blair, Algonon, Montgomery, Ala.

—(Road and Street Paving.)

Fiske-Carter Constr. Co., Greenville, S. C.

McCrary Co., J. B., Atlanta, Ga.

—Rubble Stone

Brown, Jas. W., Greensboro, N. C.

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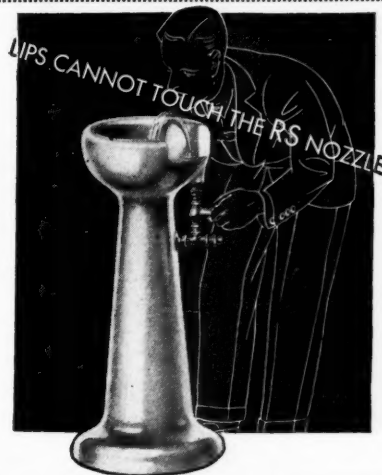
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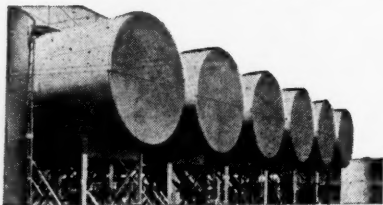
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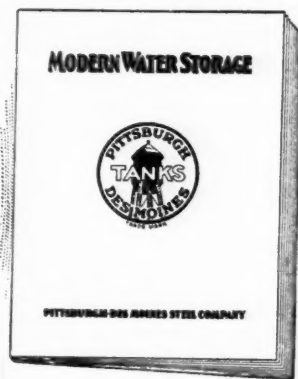


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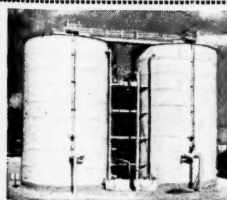
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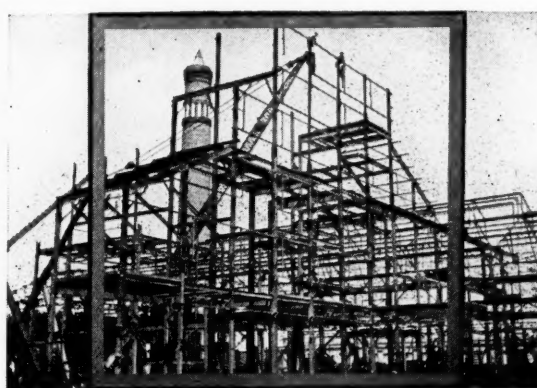
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